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MEDICAL CRITICISM OF MODERN AUTOMOTIVE ENGINEERING

Chairman's Address

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Having been impressed by the rising number of deaths and injuries occasioned by the automobile, it occurred to me that by studying the types and mechanisms of these injuries certain facts could be determined which would prove that many of these deaths and injuries could be prevented by modifications in automotive design.

Statistics of the National Safety Council, in its last full year's report, revealed that there were 33,700 deaths in motor vehicle accidents in 1946—an increase of 20 per cent over 1945. Injuries were approximately 1,200,000. Costs, including property damage, totaled about $2,200,000,000. This means 1 death every fifteen and a half minutes and 1 injury every twenty-six seconds, or that during the thirty minutes consumed in the presentation of this paper 2 deaths and 68 injuries will have taken place in this country. The magnitude of the problem is to some extent shown in a chart (fig. 1) from the National Safety Council's annual report.[1]

To combat this appalling carnage, so evident to the physician who is called on to treat the victims at all hours of the day and night, it is obvious that the physician should combat it by his influence and as his duty as a citizen, as well as a professional person.

In the first place, he should urge the teaching of safe driving to teen-agers in high schools, since the death rate in the 15 to 24 year age group in 1946 was 33.8 per 100,000 population—a figure exceeded only by the rate among persons of 65 or older. Further, a considerable number of these elderly victims were pedestrians. In 5,521 high schools out of 25,300, classroom driver education is offered, and 545 schools also provide actual behind the wheel instruction. Two million boys and girls reach driving age each year, of whom 50 per cent become drivers. A study by the American Automobile Association of young men drivers graduated from Cleveland High Schools indicated that the accident rate of those who received training in high school was substantially lower than the accident rate of those without training.

Since approximately 15 per cent of all accidents involve mechanical defects, the physician should urge frequent spot checks of automobiles by the state police. Since drivers with physical defects are involved in about 8 per cent of the fatal accidents, he should urge periodic and careful reexamination of all drivers at least to help in the reduction of this smaller percentage.

From a professional point of view, the American Medical Association has already recognized its interest and responsibility in regard to this problem by appointing a committee, headed by Dr. Herman A. Heise, of Milwaukee, to study motor vehicle accidents, and the Board of Trustees has also ordered the publication in THE JOURNAL of an annual report on this subject.

This committee, in conjunction with other similar committees of special societies, should be in a position to set up minimal standards of physical fitness as a guide to state police in their examination of prospective drivers and in their periodic reexamination of all drivers. In establishing such minimal requirements, it would be necessary to consider visual acuity, visual fields, depth perception, night blindness, persistence of dazzle, hearing, reaction time and many other physiologic qualities involved in the operation of the automobile. However, in defense of drivers with physical defects, I would like to quote a statement of Mr. W. C. James, Director, Statistical Division, National Safety Council, in a personal communication. He stated, "I think the actual experience of drivers with some physical defect, as indicated by state reports, tends to bear out my belief that most drivers with defects, particularly where those defects are for the most part corrected by mechanical devices, are able to compensate for those defects sufficiently to drive a car safely in noncommercial operations." Considerable work has already been done on chemical tests for the determination of critical levels of alcohol in the blood and urine for use in the detection of the drunken driver.

In studying the types of accidents as seen in the University Hospital of Virginia, certain injuries were observed to predominate. These are injuries to the face and head (figs. 2 and 3), usually caused by impact of the head against the dashboard, the windshield or the rear of the front seat. Crushing injuries to the chest of the driver occur when he is driven against the steering wheel (fig. 4). Injuries to the hip (fig. 5), pelvis, patella and femur (fig. 6) are caused by the protective rotation of the body when propelled forward on impact. Injuries to the elbow (fig 7) are usually caused by a blow to the elbow when projecting from the window and usually affect the driver. Of course,

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1. Annual Report, National Safety Council, 1947; Virginia Traffic Accident Facts, 1946.

many other types of injuries occur, of greater or lesser degree, but these comprise the most serious and the most frequent in our experience. Associated with many of these are internal injuries to the abdominal viscera, lungs and brain. Some of the victims suffer from severe shock and subsequently die.

Studying the reasons for and mechanics of these accidents makes obvious that redesign of the automobile can prevent many. The opinion that automotive engineering is of professional interest to the physician may appear at first glance as rather ill founded. However, a study of the types of injuries encountered and the close relationship between engineering and medicine, as exemplified during the past war (particularly in aviation medicine), should convince the most doubtful of the advantages in such a relationship to the safety of

*Types and Sources of Injuries Seen at the University of Virginia Hospital**

Type	Number	Wind-shield	Dash-board	Steering Wheel	Others
Injuries—Head and Neck					
Abrasions, Lacerations, Contusions	65	29	22	5	7
Fractures	10	2	5	1	2
Concussions	9	4	4	0	1
Total	82	35	31	6	10
Injuries—Hip and Leg					
Abrasions, Lacerations, Contusions	18	0	16	0	2
Fractures	10	0†	6	0	4
Total	28	0	22	0	6
Injuries—Arm					
Abrasions, Lacerations, Contusions	4	2	1	0	1
Fractures	3	1	0	0	2
Total	7	3	1	0	3
Injuries—Chest					
Contusions	9	2	1	6	0
Fractures	3	0	1	2	0
Total	12	2	2	8	0
Injuries—Central Nervous System					
Concussions	10	6	3	0	1
Vertebral fracture (with or without cord compression)	6	1	1	0	4†
Total	16	7	4	0	5

* The statistics were compiled during a period of seven months from the records of approximately one third of the cases only, since in the remaining two thirds the source of the injury was not stated.
† Two of these resulted from the front seat being thrown forward.

the passenger. A few of the aeronautic problems requiring such joint application of knowledge were: (1) parachute harness design, (2) size and positioning of escape hatches, (3) design of instrument dials and the positioning of flight instruments, (4) shape and placement of control handles, (5) design of oxygen equipment and the pressurization of cabins, (6) flight clothing, (7) cockpit standardization, (8) the ejection seat and (9) crash injury prevention, ditching procedures, air sea rescue equipment and technic—to mention only a few.

In airplane design, the engineer has realized that performance is dependent on two distinct factors, the machine itself and its operator. The same is equally true of the automobile, its record on the highways depending on both the characteristics of the machine as well as those of its driver.

Although the motor vehicle accident rate has been substantially reduced over the years, and particularly in the last two or three years, despite heavy increases in traffic volume, there is still much to be done. In the early 1930's approximately 16 persons were killed for every 100,000,000 miles of motor vehicle travel. In 1947 fewer than 9 persons were killed for every 100,000,000 miles. This reduction in mortality rate

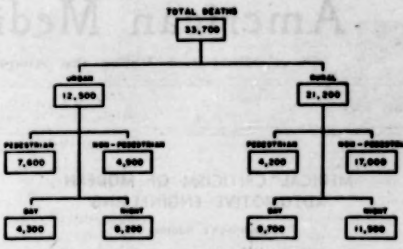

Fig. 1.—An analysis of traffic accident fatalities, 1946.

can be attributed to the indefatigable work of the National Safety Council and the many other organizations and persons who were interested in this problem. Without this reduction there would have been close to 60,000 deaths in 1947, as compared to the 32,000 which actually occurred.

However, in spite of the success of these campaigns, the automobile still remains a lethal and crippling agent, and since there appears to be little likelihood of accomplishing radical changes in human nature in general and exuberant youth in particular, it would seem the

Fig. 2.—Facial contusion and laceration from dashboard or windshield.

part of wisdom to shift the emphasis, for the moment at least, to desirable alterations in the machine itself, rather than to place all emphasis on attempts to bludgeon "old Adam" into safer driving practices.

Our highways are becoming increasingly laden with cars driven by average persons, and it appears inevitable that these machines will continue to collide, pass on

turns, fail to observe stop signs, leave the road at high speeds and afflict mankind much as they have in the past.

A shift of thought away from the fields of "safety regulations" and "law enforcement" has resulted in the suggestions to be presently advanced which are intended as measures to save life and prevent injury when automobiles are mismanaged.

SUGGESTIONS FOR SAFETY

Speed.—Speed was a factor in two out of five fatal accidents,[1] and in many of our most serious accidents it was the main factor. Whenever a driver is involved in an accident while operating faster than conditions warrant, speed is reported as a factor in the accident, although this speed may be no more than 15 to 20 miles per hour. However, in 20 per cent of the accidents [1] in which speed was a factor, the speed was greater than 50 miles per hour. The problem of high speeds could be solved simply by the use of governors on all cars, limiting the top speed to 55 miles per hour, but in no way interfering with acceleration at lower speeds. Since one is inclined at first hand to assume that the public will not tolerate such control, it might be interesting

Fig. 3.—Depressed fracture frontal bone, from impact against rear of front seat.

to quote from a survey made by the Traffic Engineering and Safety Department of the American Automobile Association.[2] The following questions were asked, among many others. "If a simple device were developed to limit the top speed without affecting acceleration at lower speeds, would you favor its incorporation in new passenger cars?" Of the 4,102 replies received, 4 persons answered "yes" for each 3 that answered "no." The top speed in the group favoring governors was 55 miles per hour.

STRUCTURE

Frame and body of welded "unit construction" would be helpful. Such structure should also include "crash struts," as found in aircraft.

Windshield and Windows.—Windshield and windows should be made of "a plastic material," in order to eliminate cuts from broken glass, a common finding in accident victims. A windshield which ejects on impact is at present standard equipment on one of the newer automobiles and should, no doubt, prevent many injuries. However, "a plastic material" instead of safety glass will give added protection. While special cleaning materials and technics are required, its use in aircraft is universal and satisfactory. The same material should also be used in headlight lenses. Both windshield and rear windows should more nearly revert to the vertical, for better visibility, particularly important in rain, sleet and snow.

Fig. 4.—Severe crushing injury of the chest from steering wheel, with fractured ribs, pneumothorax (right) and interstitial emphysema.

Doors.—Single doors should be standard, with windows large enough to serve as escape hatches and high enough to prevent passengers from riding with their elbows comfortably protruding. Sponge rubber elbow

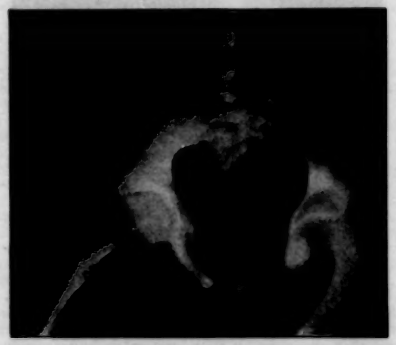

Fig. 5.—Dislocation of hip, from body rotation on impact.

rests would take care of passenger comfort. The door latches should be operated both from rear and front seats, with the safety lock on the front latch, to prevent the opening of the door by children.

2. Research Report no. 29, American Automobile Association Traffic and Engineering Department, July 1, 1946.

Bumpers.—The front bumper should be mounted on "oleo shock absorbers," in a manner similar to the landing gear in airplanes, which quickly and efficiently absorbs the shock of the heaviest planes on landing, even when poorly executed.

Fig. 6.—Multiple fractures of femur, from impact against dashboard.

Tires.—(*a*) Tire treads should be designed to give maximum traction and to provide the best antiskid qualities, on the basis of actual tests by some disinterested agency. (*b*) Danger from blow-outs should be eliminated as far as possible by the use of blow-out-proof tubes, even at the expense of some riding comfort, if necessary.

Fig. 7.—Fractured elbow, from side swipe while elbow was protruding from car window.

Interior Devices.—(*a*) A glare-proof rear view mirror, for night driving; (*b*) a latch to lock the backs of front seats in position in the coach type cars, to prevent the added impact of them to the front seat passengers in sudden stops; (*c*) safety belts, such as are used as standard equipment in aircraft—their use might well be one of the most effective single factors in preventing serious injury; (*d*) a hydraulic steering column which will move forward under a force of approximately 100 foot pounds—this would do much to prevent chest injuries of the driver from forceful impact against the wheel; (*e*) crash pads—the installation of sponge rubber padding on the dash and back of front seats would eliminate many of the head injuries so common today—and (*f*) elimination of all projecting handles, knobs, buttons and such items from the interior and also from the exterior wherever possible.

Exterior Lighting.—The importance of exterior lighting to safety is apparently well appreciated by the Interstate Commerce Commission, but has been neglected by the manufacturers of passenger cars. Such lighting

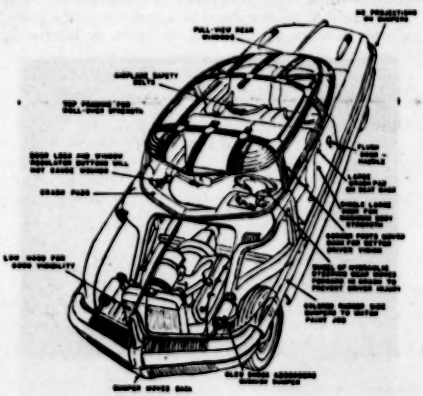

Fig. 8.—Design of car embodying proposed safety devices, as drawn by Stewart Rouse, *Popular Science Monthly*, April 1947, in article by Devon Francis, "Cars Can Be Safer."

should include: (*a*) red reflectors at corners of fenders and top, (*b*) blinking turn indicators front and rear, (*c*) large stop light and dual tail lights and (*d*) luminous paint on outside margins of trucks, trailers and busses and consideration of its use for strip marking on highways.

Vision.—(*a*) The provision of the largest possible visual field is of the utmost importance. This should be of a full 360 degrees, with top-supporting columns reduced to a minimum compatible with safety in the event of turning over. Front supporting columns should be moved further to the rear.

Lowering and shortening of the hood would give a much better view of the roadway, especially on sharp hills. In the Automobile Association of America's survey,[2] two thirds of the replies checked the driver's view of the roadway as the most important single factor in body design. Less than 1 in 6 voted for appearance. More nearly vertical windshields and rear windows have been previously mentioned.

(*b*) Shiny, reflecting surfaces should be eliminated from the driver's visual field. This could be simply

accomplished by eliminating all chromium trim and by painting the top of the hood and dash a nonreflecting dull optical black. The use of such paint on metal aircraft has long been an established convention.

(*c*) The speedometer should be placed at the top of the instrument panel, directly in front of the driver, since it is his most important instrument. In addition to the miles per hour, it should also include the stopping distance in feet under average driving conditions, as a constant reminder for safe driving. Both the speedometer and other dials should be illuminated by means of a "Navy red" light to maintain the driver's dark adaptation at night. A flashing red light or auditory signal might well be included to indicate the maximum safe speed of 55 miles per hour. Again, the Automobile Association of America's survey noted four fifths of their replies voted for dials to be located for easy reading. Finally, the light switch should be placed on the driver's side of the panel and designed to eliminate error when operated by "feel."

(*d*) The use of a polarized windshield to minimize glare from the highway would be of particular value and, when coupled with oppositely polarized headlight lenses, "blinding" in night driving would be eliminated. The added cost could, no doubt, be largely absorbed by the elimination of clocks which do not run, radios, radiator ornaments and other useless gadgets which are now included in the cost of an automobile whether wanted or not.

(*e*) More adequate defrosters and windshield wipers should be provided. This defrosting and wiping equipment should be installed at both windshield and rear windows, and the wipers should be so designed as to wipe a larger area than at present.

COMMENT

There is an abundance of evidence (obtainable from air crash reports) that the adoption of construction methods and safety features now employed by the aviation industry would render it at present possible to build motor cars capable of withstanding collisions, leaving the road at high speed and overturning, with greatly reduced likelihood of injury to their occupants, as well as reducing the likelihood of such accidents. It is suggested that a cooperative attempt by the automotive industry and the medical profession to produce such vehicles would be well worth while, especially since the automotive industry will be soon faced with the design of radically different vehicles (fig. 8).

The magnitude of the medical, economic and social problems entailed by the continued use of the motor car in its present form far outweighs in importance any monetary consideration arising from the necessarily high costs of such research and new design. The only influence of aircraft design apparently so far adopted by automotive engineers is the erroneous one that the aerodynamic principles of a jet-propelled aircraft should be applied to a vehicle the speed of which should be limited to 55 miles per hour on the ground.

I agree with Mr. A. W. Stevens, President of the Automobile Safety Association of Boston, when he says, "Automobiles should be redesigned to stress safety rather than speed and appearance. This suggestion has often been made, but has been religiously disregarded by automotive engineers and manufacturers."

I also agree with a recent editorial in the *Times Dispatch*, Richmond, Va., in a discussion of this problem, which concluded with this statement: "Disregard of human life has always been the measure of barbarism. If we are to become more civilized, we must place the value of human life above the prestige value of speed and appearance in motor cars."

It is my confirmed belief that ultimately the design of the automobile will include installations necessary to the reasonable safety of its passengers. Meanwhile, it is interesting to speculate as to the traffic casualty incidence which will be tolerated before some concerted action along these lines will be taken—2,000,000 casualties annually? 3,000,000? It would be to the credit of the medical profession generally if the impetus toward furnishing the public with a safer means of transportation should be supplied from among their number.

CLINICAL PROBLEMS IN PENICILLIN SENSITIVITY

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With the rapidly increasing use of penicillin, the problems surrounding the management of patients who manifest reactions to this drug assume immediate practical importance. It is the purpose of this paper to describe some of the forms of reaction which we have encountered, with emphasis on the allergic eruptions following systemic administration, to evaluate the diagnostic and prognostic significance of the penicillin cutaneous test and to present our experiences with penicillin desensitization.

CLINICAL MATERIAL AND METHODS

The persons tested for sensitivity to penicillin and trichophytin included 406 adults, 250 men and 156 women, and 91 children, ranging in age from 2 months to 12 years. Of the 406 adults, 276 had never had penicillin and 130 had received the drug in varying amounts. Of the children, 65 had had no penicillin and 36 had received it.

Tests were performed by the intradermal method, readings being made either at forty-eight hours for the delayed reaction or at fifteen minutes for the immediate response. To induce the latter reaction, the standard allergic test dose, 0.01 to 0.02 cc., was employed; for the former test, 0.1 cc. of penicillin solution was injected. In the course of these experiments several brands of commercial penicillin in many different lots were used, but all reactions to these were checked by a simultaneous cutaneous test with crystalline penicillin of known potency. In the early days of this work the crystalline penicillin used was that of the Food and Drug Administration; later, other crystalline preparations were used.

Our standard cutaneous test for the delayed intradermal reaction employs 2,000 units ,or about 1.2 mg., of crystalline penicillin in 0.1 cc. of isotonic solution of sodium chloride. A good, preferably light-colored, commercial preparation of the amorphous form may be substituted if necessary, or the preparation with which the patient's reaction may have developed may be used. Then, it is best to use a crystalline penicillin or a known nonreactor as a control, for some reactions may be due to factors other than the penicillin.

Additional tests employed included the immediate intradermal reaction, for which the same concentration of crystalline penicillin may be used, although with a smaller test wheal, as already indicated. Amorphous preparations are more likely to give non-

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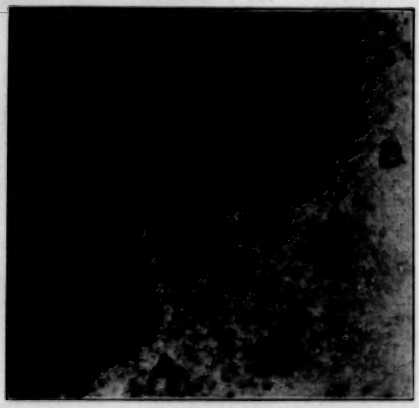
specific wheals; with these it is best to use a solution of 5,000 units per cubic centimeter concentration.

The trichophytin preparation employed was freshly made in our laboratory from Trichophyton mentagrophytes according to a method previously described.[1] The trichophytin tests were performed in the standard manner, with a 1:30 dilution in 0.1 cc. of isotonic solution of sodium chloride. Readings were made at forty-eight hours and again, on occasion, at three to five days.

TESTS OF PENICILLIN SENSITIVITY

The Delayed (Forty-Eight Hour) Cutaneous Test.—The most important test of penicillin sensitivity is, in our opinion, the delayed reaction to the intradermal injection of penicillin. It was first described by Welch and Rostenberg,[2] who noted its occurrence in 5 per cent of 140 persons who had had no previous treatment with penicillin. When performed with 2,000 units (1.2 mg. of crystalline penicillin G in 0.1 cc. of isotonic solution of sodium chloride and readings made forty-eight hours later, the test offers a reliable index of penicillin sensitization. The reaction to this test is similar to that of the trichophytin test. The characteristic of the reaction at its height is an area of erythema, often rather vivid, which is usually associated with edema or infiltration. This induration may be prominent enough to give the resulting lesion a plaquelike appearance. The reaction area is at least 1.0 cm. in diameter, but it may reach three times this size and may be studded with small papules and even vesicles. Rarely, central necrosis may be observed. As with the trichophytin test, the largest diameter of the area of reaction may not be reached until three to five days after testing and the lesion may persist for a week or longer, gradually disappearing, with scaling. Local pruritus is a common accompaniment of the reaction to the test.



Photograph showing, *A*, characteristic positive reaction to the intradermal penicillin test (2,000 units) after forty-eight to seventy-two hours, and, *B*, a positive reaction to trichophytin. This patient, who never had penicillin, is one with so-called spontaneous sensitivity.

In several instances, we have shown that measures which destroy the antibiotic potency of penicillin also abolish its antigenic activity, as indicated by its capacity to elicit a delayed type of specific positive cutaneous reaction. This parallelism is strong evidence that the cutaneous reaction is due to penicillin itself and not to any other factor which might be present, even in the crystalline product. The exquisite sensitivity of some patients is indicated by the results of tests with small quantities of penicillin. In 1 patient, a positive reaction could be elicited with 5 units, or approximately 0.0025 mg., of crystalline penicillin. In another patient, a measurable reaction of erythema occurred to 5 units and was still visible when only 2 units, or 0.0012 mg., of penicillin G was used. In this patient comparable sensitivity on cutaneous test was shown to pure penicillin X as well.[3]

The Patch Test.—In our hands this test was of doubtful value as an index to general penicillin allergy. Our series does not include the forms of dermatitis following topical application of the drug, in which the patch test may be of greater usefulness. Applied in ointment form, with 1,000 to 2,000 units of penicillin per gram, in a base of hydrous wool fat U. S. P. and petrolatum, the test gave a negative reaction in 63 patients. When employed as a dry patch containing 100,000 units of amorphous penicillin, the test also yielded negative results, except in persons with pronounced sensitivity, as proved by the graded intradermal test. With the technics which we employed, the penicillin patch test could not be relied on as a sensitive indicator of penicillin allergy.

The Immediate Intradermal Cutaneous Test.—Reactions to this test, in which whealing was looked for after ten to fifteen minutes, were negative in our series. The test was performed on 82 subjects who had received penicillin without reaction, and also on 10 patients in whom an eruption of the urticarial type had occurred as a result of penicillin treatment. In every instance the reaction was negative. The urticaria does not accompany the positive reaction to the penicillin test of the delayed type. In 3 patients with urticarial reaction to penicillin, tests using a penicillin–human plasma albumin complex gave negative results. That this preparation contained active penicillin was proved by elicitation with it of a delayed type of positive reaction in a suitable subject.[4]

CLINICAL REACTIONS TO PENICILLIN

Other investigators reported a variety of reactions to penicillin encountered both on topical application and on systemic administration. These reactions ranged from localized dermatitis to widespread eruptions and included many of the manifestations associated with serum sickness. In subjects who reacted more violently, hyperpyrexia, asthma, pulmonary edema and vasomotor collapse were observed. Our own experience dealt wholly with the two major, relatively common types of reaction to systemic treatment with penicillin: type 1, reactions of the urticarial, serum-sickness-like type, in which sensitization is induced by treatment; type 2, reactions with an erythematovesicular eruption, resembling the trichophytids.

Type 1: Reactions of the Urticarial, Serum-Sickness-Like Type.—The urticaria and the erythemas, together with joint pains and fever in some instances, occurring after a definite incubation period, comprise the com-

1. Peck, S. M., and Glick, A.: Trichophytin with Special Reference to the Specific Skin Reactive Factor, Arch. Dermat. & Syph. 43:839 (May) 1941.

2. Welch, H., and Rostenberg, A., Jr.: Hypersensitivity of the Tuberculin Type to Crystalline Penicillin Sodium, J. A. M. A. 126:10 (Sept. 2) 1944; A Study of the Types of Hypersensitivity Induced by Penicillin, Am. J. M. Sc. 210:158 (Aug.) 1945.

3. Crystalline penicillin X was supplied by Lederle Laboratories, Inc., Pearl River, N. Y.

4. Chow, B. F., and McKee, C. M.: Interaction Between Crystalline Penicillin and Human Plasma Protein, Science 102:67 (Jan. 19) 1945. This preparation was supplied us by the Squibb Institute for Research, New York.

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monest allergic reaction to penicillin. Because of the time needed for development of the newly induced sensitivity, the reaction was called the delayed type by Kolodny and Denhoff.[5] Not rarely it manifests itself only several days after treatment with the drug has ended. In rare cases this interval may be as long as three weeks. Severer reactions, with angioneurotic edema, asthma, hyperpyrexia and pulmonary edema, have been described. Some reactions which occur on second or subsequent administration of the drug may be of the accelerated type, with a short or no incubation period. This acceleration is comparable to what may occur on readministration of other drugs (e.g., the sulfonamide compounds) or serum.

In 25 of our patients (21 men and 4 women) reactions developed which were of this type. The eruption varied from slightly patchy erythema of a transient character to pronounced, generalized urticaria of considerable severity. Macular erythemas not of an urticarial type were common. In several patients the eruption was limited to the buttocks and thighs. In most instances there were none of the accompanying manifestations that simulate serum sickness. However, in 2 patients there was a rise of temperature, and mild joint pains were noticed by several others. In most subjects, the eruption had followed intramuscular injections, but in 1, tablets taken orally in good-sized doses for one day only were sufficient to elicit a typical serum-sickness-like reaction nine days later. Other reactions of this kind have been reported to us, and it is apparent that the oral route is not a safeguard against them. In another patient the urticaria followed bronchoscopic instillation. In all subjects the eruption cleared within several days, although we have been informed of rare instances in which urticaria after penicillin therapy continued several weeks.

The usual incubation period was seven to twelve days. For 1 patient it was as long as eighty days, while he was receiving continuous therapy. In 2 subjects the reaction began on the second or third day. One of these patients had a definite history of previous treatment with the drug. For the other patient there was no explanation, unless the patient had failed to give an accurate history on this point.

In 10 subjects—all men—the cutaneous test gave a positive reaction. The reaction to the trichophytin test was positive in only 4 subjects—all men. While a positive reaction to a penicillin test is helpful in confirming a diagnosis of this type of allergy, a negative reaction does not exclude it. Since the reaction to penicillin may be positive in more than one third of such persons, the test is worth doing in an effort to prove that an eruption is due to penicillin. Thus, the test might have practical value when several medications are being given simultaneously. The problem then arises as to which drug is responsible for the eruption and whether the penicillin must be discontinued.

The incidence of the delayed type of positive reaction to the penicillin test in this group of patients, amounting to 40 per cent, was far greater than that in the group who had never received penicillin. The so-called spontaneous positive reaction, as has been noted by other investigators, occurred in about 5 per cent of such persons routinely tested. The close correlation of the results of the forty-eight hour cutaneous test with penicillin and the clinical sensitivity to the drug was further borne out by another observation. Of 98 patients who had received penicillin without reaction, not 1 reacted positively to the cutaneous test. Of all patients receiving penicillin whom we tested, 130 in number, 17 had a positive cutaneous reaction of this type, an incidence of 13.4 per cent. The expected incidence of positive reactions in a group that had not received penicillin, as judged from our own observations and the experience of others, would be about 5 per cent, or 6 patients. The conclusion is justified that the more frequent occurrence of the positive reaction after penicillin treatment is itself the result of induced sensitization to the drug. Among 36 children 12 years of age or less who had received penicillin, 1 had a positive reaction to the penicillin cutaneous test.[6] Two other children had an eruption during treatment which was believed to be due to the drug, but the test gave a negative reaction.

Of particular interest is the preponderance of men among persons receiving penicillin who gave a positive reaction to the cutaneous test with penicillin after forty-eight hours. All 17 patients with a positive reaction were men. This striking predominance is noted throughout all types of penicillin sensitivity, whether urticarial or erythematovesicular or of the latent "spontaneous" type.

The immediate intradermal test was also performed on 10 of these patients, with negative results. In 3 subjects this test was performed with a penicillin–human plasma albumin complex, as well as with crystalline penicillin, but the result was negative for each form.

Thus, with the urticarial type of penicillin allergy, an eczematous cutaneous test lesion appears to be the best objective index of sensitivity. This manifestation is an instance of a discrepancy between the cutaneous test and the clinical lesion of the disease. Whether the eczematous response is due to concomitant epidermal sensitization, perhaps to seepage along the needle track, is a matter of speculation. Perhaps the sharp demarcation of the vascular allergic reactions from the epidermal reactions, which is a generally accepted hypothesis, requires modification, particularly in some instances of penicillin allergy.

The induced urticarial form of penicillin allergy is often temporary, even transient, in character. This observation is in accord with that of Lyons[7] who expressed the view that this form of penicillin allergy is transient and does not usually recur with readministration. Thus, in 1 of our patients large areas of patchy erythema, as well as typical urticarial wheals, appeared on the trunk two months after the beginning of treatment. The use of the drug was continued, however, with the aid of tripelennamine hydrochloride N. N. R. ("pyribenzamine hydrochloride"), and, ultimately, the mild eruption disappeared and did not recur. Similar observations were made on a number of our patients and may be found in the literature. In 2 patients of this group whose reactions to the cutaneous test were positive, retests made fifteen months later gave negative results.

However, exceptions occurred, such as in the young man who had had severe urticaria and joint pains after bronchoscopic instillations of penicillin and who still had a positive reaction to a penicillin cutaneous test of the forty-eight-hour type eighteen months later. He also reacted with a mild, general pruritic eruption after only a few doses of the drug on two occasions three and fifteen months from his initial reaction.

5. Kolodny, M. H., and Denhoff, E.: Reactions in Penicillin Therapy, J. A. M. A. 130:1058 (April 20) 1946.

6. This boy, 12 years of age, had a general urticarial and a local eczematous reaction on the buttocks.

7. Lyons, C.: Penicillin Therapy of Surgical Infections in the U. S. Army, J. A. M. A. 132:1007 (Dec. 18) 1946.

One of the patients in this group had a previous history of mild urticaria. On cutaneous testing with standard allergens, a positive reaction was obtained to timothy extract, but other tests gave negative results, including that of Penicillium spore extract. Two other persons with urticaria due to penicillin, who are not included in this series, had a history of allergy. However, the majority of our patients gave no history of allergy.

A basic practical point is the preponderance of this form of penicillin allergy, as with the other form, among men. Of 25 patients in this group, 21 were men and 4 women. In view of these statistics, allergic reactions to penicillin can be anticipated to occur at least three times as frequently among men as among women (table 1). There is a comparable low incidence among children. We encountered only 3 cutaneous eruptions in a group of 36 children receiving penicillin.

In the management of patients with this form of penicillin allergy, treatment with the drug is usually stopped if the indication for its use is not urgent or the reaction is a severe one. However, if the need for penicillin is great and the reaction mild, the penicillin may be continued with the aid of symptomatic medication, such as epinephrine and the antihistamine drugs. The problem will arise of the readministration of the drug to patients who have had a previous urticarial, or similar, reaction. Such factors as the type and severity of the reaction and the interval since its occurrence should be taken into consideration. Substitute medication, such as the sulfonamide compounds, ought not be forgotten. If it is decided to use penicillin again, it is probably wise to give a few tests or provocative doses at intervals of six hours. Should these doses fail to elicit a reaction, treatment may be started, but preferably in small doses at first, such as 2,000 to 3,000 units every three hours. Dosage may be gradually increased during the next several days.

A preliminary cutaneous test might be useful in patients with a history of reactions, but an accurate reading cannot be expected before twenty-four hours. If the reaction is positive, it would suggest even greater caution, as persistent clinical sensitivity is then much more likely. In all cases with a history of previous reaction, it is unwise to give large doses, to employ the oil and beeswax preparation, or to administer the drug intravenously without preliminary tests of the type suggested. In some instances, it may be necessary to resort to desensitization. This procedure will be discussed later. Again, it may be emphasized that the induced sensitivity to penicillin is often temporary, and the drug is tolerated well on readministration.

Type 2: Reactions with Erythematovesicular Eruptions, Trichophytid Type.—This form of penicillin sensitivity may be conceived of as existing in a latent and in an active stage. The former stage is characterized by no clinical phenomenon but simply by the presence of a positive reaction to the forty-eight hour penicillin cutaneous test without a history of previous administration of the drugs. This reaction is the so-called spontaneous one of the tuberculin type, to which attention was first called by Welch and Rostenberg.[2] The active stage, based on the preexisting latent sensitivity, is that of the characteristic erythematopapulovesicular eruption, which tends to localize primarily on the hands and feet and in the groins. It often becomes generalized and may start on the trunk, but the most intense portions of the eruption are likely to be on the hands and feet. Here it develops most fully, often progressing to a severe vesiculobullous reaction, which may become pustular. General desquamation is usual, and, if acute, the reaction takes on the character of an exfoliative dermatitis. Pruritus may be intense. Milder instances, with only slight interdigital vesiculation or exfoliation of the palms, also occur.

TABLE 1.—*Penicillin and Trichophytin Reaction in Patients Who Have Received Penicillin*

Group Tested	Number Tested	Positive Reaction to Penicillin		Positive Reaction to Trichophytin		Positive Reactions to Both Penicillin and Trichophytin		% Negative Reactors to Trichophytin Among Positive Reactors to Penicillin	% Positive Reactors to Penicillin Among Positive Reactors to Trichophytin
		Number	Percentage	Number	Percentage	Number	Percentage		
Adults	130	17	13.17	28	21.5	8	6.1	8.7	28.5
Men *	82	17	20.17	25	30.4	8	9.7	15.7	32.0
Women *	48	0	.....	3	6.2	0	...	0	0
Children	36	1†	.....	0	....	0	...	....	....
Type 1‡ (21 men, 4 women)	25	10 (men)	.....	4 (men)	....	2	...	38.0	50.0
Type 2 (all male adults)	7	7	.....	6	....	6	...	0	100.0
No reaction	98	0	.....	18	....	0	...	....	....

* Eruptions developed in 21.2 per cent of all men and in 8.3 per cent of all women.
† This child was 12 years old.
‡ This group included 3 boys, 12 years, 3½ years and 10 months of age, respectively.

MECHANISM OF "SPONTANEOUS" SENSITIVITY

Latent Stage.—Among 276 adult ward patients who had never received penicillin, there were 15 with a delayed positive reaction to a penicillin cutaneous test. This incidence of 5.4 per cent confirmed the earlier report by Welch and Rostenberg [2] of an incidence of about 5 per cent. Of 168 men who had received no penicillin, 11 showed a positive reaction to the penicillin test. Of 108 women, 4 reacted positively. Of 65 children, none had positive reactions.

Welch and Rostenberg [2] attributed this form of positive reaction to exposure to Penicillium spores from inhalation or handling. However, several later studies indicated a more probable explanation for this apparent "spontaneous" sensitivity to penicillin. The observation, first made by Graves, Carpenter and Unangst,[8] of the occurrence of vesicular eruptions on the hands and feet following penicillin treatment suggested to the workers a relation between these eruptions and previous fungous disease of the skin. Their observations have been confirmed by other investigators.[9]

8. Graves, W. N.; Carpenter, C. C., and Unangst, R. W.: Recurrent Vesicular Eruptions Appearing During Administration of Penicillin, Arch. Dermat. & Syph. **50**:16 (July) 1944.

9. Lamb, J. H.: Allergic Reactions During the Administration of Penicillin, Arch. Dermat. & Syph. **52**:93 (Aug.) 1945. Cormia, F. E.; Jacobson, L. V., and Smith, E. L.: Reactions to Penicillin, Bull. U. S. Army M. Dept. **41**:694 (Dec.) 1945. Bauer, G. H.: Allergic Dermatoses Complicating Penicillin Therapy, Arch. Dermat. & Syph. **54**:292 (Sept.) 1946. Kolodny and Denhoff.[5]

A significant clue to the mechanism by which dermatophytosis may induce a positive reaction to the penicillin test, ultimately leading to the eruptions of this type, is to be found in the work of Peck and Hewitt.[10] These investigators showed that common pathogenic fungi, which are responsible for many of the dermatomycoses, are capable of producing an antibiotic substance possessing many of the properties of penicillin. This report is another link in the chain of evidence which makes it entirely probable that in the course of fungous infection of the skin sensitization to penicillin takes place in much the same way as sensitization to trichophytin.

The positive reaction to the trichophytin test may be taken as an index of existing sensitivity to this fungous extract and as an indication of past or present fungous infection. The relation of the positive penicillin reaction to the trichophytin reaction is therefore of great interest (table 2). Trichophytin tests caried out simultaneously in the patients who had not had penicillin treatment showed positive reactions in 92, or 33.3 per cent. Among the 15 penicillin-positive patients, there were 9 who were also trichophytin positive, or an incidence of 60 per cent, almost twice the incidence among penicillin-negative persons.

On the other hand, 6 patients with this form of penicillin sensitivity were trichophytin negative. One must conclude that these patients were sensitized in some other manner, or that in some persons cutaneous infection with a fungus may not induce a positive trichophytin reaction, or that the reaction was only temporary or below the threshold of elicitation. However, these explanations lack force in that trichophytin sensitization appears to occur readily, as indicated by the high incidence of a positive reaction to the fungus among the general population, usually estimated at about 40 per cent.[11]

Because of the characteristics of the "spontaneous" positive reaction to the penicillin cutaneous test, one may assume by analogy with other similar reactions, whether trichophytin or to tuberculin, that active infection of the body with a fungus capable of producing either penicillin or a closely related substance must have occurred at one time or another. Such an infection may conceivably have involved some tissue other than the skin, such as the lungs. The character of the test itself bespeaks either actual epidermal sensitization, such as might occur with external contact or in dermatophytosis, or the allergy of infection, as in the positive tuberculin reaction. Sensitization from inhalation of Penicillium spores could hardly be expected to lead to a reaction of this type. Experience with large groups of atopic persons in this area indicates a low incidence of immediate positive wheal reactions to cutaneous tests with Penicillium spore extracts. Moreover, in several subjects with positive reactions to penicillin, the reaction to Penicillium extract was negative. Furthermore, the percentage of patients sensitive to penicillin among trichophytin-positive persons was 9.7 per cent, as against 3.2 per cent among trichophytin-negative persons. This incidence offers further evidence of the role of fungous infection in producing latent penicillin sensitivity. Additional, although indirect, evidence of the relation between fungous infection of the skin and trichophytin sensitivity, on the one hand, and "spontaneous" penicillin sensitivity, on the other, is found in our observations on 65 children, ranging from 2 months to 12 years of age. In none of these children was the reaction to either the penicillin or the trichophytin test positive. None of them had received penicillin. These negative findings, supported by previous statistical analyses which revealed that children below 12 years of age rarely show a positive trichophytin reaction, thus coincide with the suggested hypothesis (table 2).

It may be noted that of the 15 patients with a positive reaction to penicillin of the delayed type, 11 were men and only 4 were women. Of the 11 men, 8 also reacted positively to trichophytin. The greater tendency among men to latent penicillin sensitivity recalls the higher incidence of trichophytin sensitivity previously observed among men. Thus, in 776 subjects tested by Peck and associates,[11] 43 per cent of the men were sensitive to trichophytin, as against 29.9 per cent of the women. It is of some practical value to know that it is particularly among men with dermatophytosis, or with a positive reaction to the trichophytin test, that a "spontaneous" positive reaction to penicillin is most likely to occur. It may be pointed out that there was a preponderance of men in the group with induced penicillin sensitivity, 21 men to 4 women. All 11 patients in the urticarial group with a positive reaction were men. The tendency for men to become more readily sensitized to penicillin is underscored by the observations on group 2, the 7 patients of which were men. The explanation for this sex preponderance is at present obscure. It will be interesting to see whether other series of cases of penicillin sensitivity reported from civilian hospitals support this observation.

TABLE 2.—*Penicillin and Trichophytin Reactions Among Patients Never Receiving Penicillin*

Number Tested	Positive Reaction to Penicillin		Positive Reaction to Trichophytin		Positive Reactions to Both Penicillin and Trichophytin		% Positive Reactors to Trichophytin Among Positive Reactors to Penicillin	% Positive Reactors to Penicillin Among Positive Reactors to Trichophytin	% Positive Reactors to Penicillin Among Negative Reactors to Trichophytin
	Number	Percentage	Number	Percentage	Number	Percentage			
276	15	5.4	92	33.3	9	3.2	60	9.7	2.2
Men—184	11	6.5	68	40.4	8	4.8	72.7	11.7	3.0
Women—108	4	3.7	24	22.2	1	0.9	25.0	4.1	2.5
Children—65	0	...	0	....	0	...	....	...	...

CLINICAL SIGNIFICANCE OF THE "SPONTANEOUS" POSITIVE REACTION

In many instances the reaction appears to be a reliable index of general latent hypersensitiveness which warrants great caution in the administration of penicillin. The following case is informative:

C. V., a 40 year old Puerto Rican man with mild, quiescent epidermatophytosis, had had no penicillin previously. On cutaneous test, Sept. 8, 1946, he showed a positive reaction to commercial preparations of both amorphous and crystalline penicillin, 2,000 units in 0.1 cc. isotonic sodium chloride solution U. S. P.

10. Peck, S. M., and Hewitt, W. L.: The Production of an Antibiotic Substance Similar to Penicillin by Pathogenic Fungi (Dermatophytes), Pub. Health Rep. 60: 148 (Feb. 9) 1945.

11. Peck, S. M.; Botvinick, I., and Schwarz, L.: Dermatophytosis in Industry, Arch. Dermat. & Syph. 50: 170 (Sept.) 1944.

The reaction to the latter preparation was the larger, showing an area of erythema 1.5 cm. in diameter and edema with papules. The trichophytin test gave a 4 plus reaction. When the patient was retested six months later, March 3, 1947, the area of reaction to penicillin was 3 cm. in diameter. Desensitization was begun, but the procedure caused some local reactions. On March 12, to determine whether a mild reaction could be elicited, he was given instructions to take penicillin tablets. Although warned to stop the medication at the first sign of eruption or pruritus, he took 300,000 units orally for two days and 600,000 units on the third day. After the first few doses generalized pruritus was noticed, and a general erythematopapular eruption appeared, starting at the sites of previous penicillin tests and injections, but involving especially the fingers and palms and toes in an acute vesiculobullous eruption. By March 17 the eruption was fading, but desquamation of the palms was still noticeable on March 28. A retest of penicillin, 1,000 units, on March 26 produced an area of erythema 1.0 cm. in diameter, but no induration. This area was less than would have been expected in view of the severe preeruptive reaction to 2,000 units. It was concluded that the patient was in a stage of relative desensitization as his eruption subsided. Indeed, it may be inferred that the mechanism by which the eruption is terminated is related to the reduction in sensitivity which may follow a violent reaction. Further desensitization was carried on by hypodermic injection of small doses of penicillin at intervals of forty-eight hours, but it could not be completed because the patient lapsed from treatment.

This case demonstrates clearly the clinical significance of the positive reaction to a penicillin cutaneous test as an index of true hypersensitivity. It is also clearcut proof of the relation of the preexisting latent stage of penicillin sensitivity to the development of the erythematovesicular form of eruption which follows penicillin treatment. The presence of dermatophytosis and a strongly positive reaction to the trichophytin test complete the picture.

Such experiences suggest caution in the administration of penicillin to any patient with latent sensitivity to the drug. If there is time, and especially if the reaction is strongly positive, showing sensitivity to as little as 50 units, desensitization by one or another of the technics to be described later should be initiated. If the indication is urgent, perhaps administration of the drug can be started, but in smaller doses than usual, with a gradual increase during the next three to five days. This procedure may avoid an intense reaction, and might even have a desensitizing influence.

On the other hand, a positive reaction does not inevitably indicate that a general reaction will occur to penicillin treatment. Thus, patient L. G. had a moderate positive reaction to penicillin, but four months later he was able to tolerate the drug by aerosol inhalation in good dosage, and 40,000 units intramuscularly every three hours as well, without cutaneous eruption or other untoward effect. It is not known whether at the time of penicillin administration the cutaneous test still elicited a positive reaction.

In 2 persons the reaction was still positive after intervals of twelve and eighteen months, respectively. In 2 other subjects it was positive after intervals of four and six months, respectively, and the reaction might have persisted longer but for desensitization. However, in another subject who was observed after an interval of fourteen months, the reaction, which had been slightly positive, became negative. It is certain, then, that in some persons this type of sensitivity is persistent, perhaps in much the same way as a positive trichophytin reaction. Recognition of this fact carries certain practical implications. Inasmuch as the need for penicillin may arise at any time, it seems logical to recommend desensitization to such patients. At the least, the patient should be informed of his sensitivity and advised to mention it to his attending physician whenever penicillin treatment should become necessary. The situation is analogous to that of the patient who is sensitive to horse serum and who may require serum therapy at some time.

It seems to us wise to perform a cutaneous test with penicillin on all patients for whom treatment with the drug is planned. Examples of these nonurgent indications are its use after an operation or when a course of aerosol penicillin is to be given for bronchiectasis. It might be well, too, to give the test even when penicillin must be started without delay because of an immediate indication, such as an acute infection. The test will serve at least as a warning and a guide if its reaction is positive. A negative reaction does not, of course, preclude the possible development of the induced form of urticarial sensitivity (group 1).

Active Stage.—The eruption occurring during penicillin treatment is reminiscent of the "id" of dermatophytosis.[12] Unlike the eruption in the induced form, the reaction can occur within the first day or two, even on first administration of penicillin. However, it may not occur until the eighth, or even the eleventh, day after the beginning of treatment. Severer degrees of latent sensitivity probably become manifest with smaller amounts of the drug.

All 7 subjects in this group had a positive reaction to the penicillin cutaneous test. The trichophytin reaction was likewise positive in each of these subjects. The much higher incidence of positive penicillin and trichophytin reactions in this group than in the group with the urticarial form of reaction is significant, as indicative of preexisting sensitivity and its relation to fungous disease.

In 1 subject the cutaneous reaction to penicillin remained positive for three months, or until desensitization was started. In another person, the reaction was still positive and unchanged after a six month interval. As was pointed out in the discussion on latent sensitivity, the reaction in 2 such patients was still strongly positive after more than a year. From these observations, it is our impression that the allergy to penicillin of this type is more persistent than the urticarial type. When a reaction has occurred, it may well occur again if the drug is given in full dosage.

The clinical management of this type of sensitivity requires more caution than that of type 1 sensitivity, because of its tendency to greater persistence and because the cutaneous reactions are likely to be severer. The danger of extensive exfoliation is to be borne in mind; pruritus is often intense. Fever and joint pains are absent, but edema, especially of the face and eyelids, is common in the severer grades of reaction. For these reasons, penicillin treatment usually must be stopped.

The decision to readminister penicillin should be guided at least in part by the cutaneous test and by the intensity of the previous eruption. If the reaction was strongly positive, or could be elicited with as little as 50 units, and, if the reaction was severe, it would be safest to desensitize the patient. If time does not permit desensitization, then the possibility of substitution of sulfadiazine for penicillin should be remembered. When the need for penicillin is urgent and the reaction only slightly positive, or, perhaps, when it is

12. It might be justifiable to refer to such eruptions as "penicillids," for the antigen eliciting them is penicillin, just as the trichophytid can be elicited by trichophytin.

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not possible to await the result of the test, single provocative doses may be tried, or treatment may be started in low dosage.

When a patient has a history of this type of reaction, but the cutaneous reaction is found to be negative, it should be possible to proceed with treatment cautiously in low, and then ascending, doses. In such patients desensitization can probably be dispensed with.

METHODS AND RESULTS OF PENICILLIN DESENSITIZATION

As already indicated in the discussion on the management of cases of systemic penicillin allergy of both the urticarial and the erythematovesicular type, persons with either form may require desensitization in order to permit readministration of the drug. With type 1, the induced urticarial form, desensitization may seldom be needed, whereas with type 2, the erythematovesicular dermatitic form, it may have to be resorted to frequently.[13]

Desensitization was attempted in 8 patients. In 7 patients, desensitizing doses were given subcutaneously; with 1 the oral method was used. Any plan of desensitization implies treatment with graded increases in dosage kept below the reactive level of the patient's sensitivity. A positive cutaneous reaction offers a useful guide to desensitization. Successful desensitization is accompanied with conversion of the positive reaction to negative. When the reaction is negative to begin with, it is first of all necessary to establish that the patient is still sensitive. When this fact has been demonstrated, the patient's reactions must be employed as a guide to increases in dosage.

A typical average schedule of dosage for subcutaneous desensitization is given in table 3. The interval between injections, as well as the dosage, may be varied to some extent, depending on the degree of the sensitivity and the necessity for rapid desensitization. Thus, if the patient shows no reaction to 400 units intradermally, this amount can be used as the beginning dose. In some instances daily injections were given. We have found, however, that desensitization cannot be pushed too rapidly in most instances.

PATIENTS WITH NEGATIVE REACTIONS

In persons with urticaria whose reaction is negative, the question always arises whether sensitivity is still present. An attempt at reelicitation of the reaction is the only certain method of establishing this point beyond doubt. The dose and route of administration of penicillin for this purpose will depend, among other things, on the severity of the previous reaction, the time interval since it occurred and factors of convenience, such as whether the patient is in the hospital or is ambulatory. The most convenient form of oral administration is in form of tablets. Thus, a single dose of 50,000 units can be given on an empty stomach the first thing in the morning. If no reaction of any kind occurs, the dose might be repeated before bedtime. The next day either three or four tablets could be taken. On the third day, if no reaction has been observed, six tablets, or 300,000 units, could be given in divided doses.

When the previous reaction has been severe or when, for other reasons, it is of paramount importance to avoid all semblance of reaction, penicillin solution can be given dropwise at first, and the doses, given in tablet form, may be increased slowly over several or many days. With such a technic, the efforts at reelicitation are, for all practical purposes, transformed into a method of desensitization. While it may be useful to proceed in this manner when time permits, the method does not actually disclose whether the patient retains his sensitivity or whether he can tolerate full therapeutic dosage without undue delay.

URTICARIA WITH A POSITIVE CUTANEOUS REACTION

In a young man a severe urticaria developed on the twelfth day after initiation of bronchoscopic instillation of penicillin. The reactions to the penicillin and trichophytin tests were positive. Intramuscular injections of even moderate amounts of penicillin caused local swellings and an increase in the eruption. The desensitizing injection could not be increased rapidly without pronounced local, and even general, reactions. The initial dose had to be as small as that given in table 3 and increased slowly, with the larger doses at intervals of three or four days. It took three months to increase from 400 to 20,000 units. Even in the next two weeks the dose could not be increased above 25,000 units, and the cutaneous reaction to 2,000 units was still positive, although reduced. In the following six weeks, injections were continued at the convalescent home. For the last week or more of treatment, 30,000 and 35,000 units were given daily. At the end of that time, the cutaneous reaction had become negative to 2,000 units; the trichophytin test still caused a positive reaction. In an effort to evaluate the degree of desensitization, penicillin was administered orally in increasing dosage; 2,500,000 units were given altogether, as much as 600,000 daily without a cutaneous or other reaction.

TABLE 3.—*Desensitization Schedule for Subcutaneous Administration*

Injection	Number of Units
1	200
2	400
3	800
4	1,200
5	1,600
6	2,000
7	2,500
8	3,000
9	5,000
10	10,000
11	15,000
12	20,000

The interval between injections may be two to three days. When more rapid desensitization is necessary, daily injections may be given. If the patient is extremely sensitive, the initial dose may be as low as 50 units, and subsequent increase in dosage much more cautiously tried. Should a local reaction or a rise in temperature occur after the increase in dosage, the subsequent dose is that which elicited no reaction, and increments should be smaller.

Erythematovesicular Type.—Of our patients with type 2 sensitivity, 1 with successful desensitization permitting the therapeutic application of penicillin in effective dosage has been reported on previously.[14] For that patient the subcutaneous method was also used, and took three weeks for completion. A follow-up report revealed that in four months after desensitization the patient was again able to tolerate penicillin well, this time in doses of 50,000 units every three hours intramuscularly for several days. He refused to have a repetition of the penicillin test at this time.

A parallel case is one in which subcutaneous desensitizing doses were given daily or every other day, requiring a month for reversal of the cutaneous reaction to penicillin to negative. Penicillin given orally in doses up to 600,000 units per day for two days then elicited no eruption.

13. Pillsbury, D. M.; Steiger, H. P., and Gibson, J. E.: The Management of Urticaria Due to Penicillin, J. A. M. A. **135**:1235 (April 26) 1947.

14. Peck, S. M.; Siegal, S., and Bergamini, R.: Successful Desensitization in Penicillin Sensitivity, J. A. M. A. **134**:1546 (Aug. 30) 1947.

Patients with Latent Sensitivity.—Desensitization of patients with a "spontaneous" positive cutaneous reaction to penicillin in the latent stage of type 2 sensitivity has been carried out successfully in 3 cases. In 1 case it was accomplished slowly over a six week period; injections were given every three to seven days, the patient being ambulatory. The cutaneous reaction remained negative thereafter over a follow-up period of eighteen months. Penicillin in oil and wax, 300,000 units, caused no reaction. This observation suggests, as does the experience with other patients, that this method when successful may result in permanent desensitization. However, it is possible that reactivation of fungous infection in the skin, or elsewhere, might reinduce sensitivity.

In the second case, desensitization with production of a negative cutaneous reaction was accomplished by use of the same method in a four month period. However, retests eight months later showed a reversion to a moderately positive reaction to penicillin. Subcutaneous desensitization is being attempted again. In this instance, then, desensitization was temporary.

Desensitization had to be discontinued in 1 case because of mild general reactions, chiefly pruritus. However, the patient was uncooperative in the extreme.

Oral Desensitization.—In the third case desensitization was accomplished wholly by the oral route. Crystalline penicillin was first administered dropwise in a solution containing 5,000 units per cubic centimeter. In this way, small amounts, less than 1,000 units a day, can be given initially. This concentration was increased to 20,000 units per cubic centimeter. After three weeks tablets of crystalline potassium penicillin were given, at first 100,000 units a day, later as much as 500,000 units daily. The latter dose had to be decreased because of heartburn and headache and, when treatment was continued at 300,000 to 400,000 units daily reversal of the penicillin cutaneous test to negative resulted. In this patient a high degree of cutaneous sensitivity of the "spontaneous" type had been present both to penicillin G and penicillin X, the skin reacting with erythema to as little as 2 units, or 0.0012 mg., of crystalline sodium penicillin G.

Desensitization may be attended with great difficulty when there is an unusually high degree of latent penicillin sensitivity, as demonstrated by the quantitative graded penicillin cutaneous test. The difficulties of desensitization of an extremely sensitive patient with epidermal and anaphylactic reaction to penicillin were presented by O'Donovan and Klorfajn.[15] They succeeded in partial desensitization by means of prolonged administration of penicillin in tablet form.

It is our clinical impression that in the patient with type 2 sensitivity desensitization cannot be rushed without the risk of unpleasant local or general reactions. Among patients with urticaria, it is possible that desensitization can be accomplished more quickly in those who are not extremely sensitive.

Therapeutic Desensitization.—When the need for penicillin is urgent, a modification of the usual technic is suggested, employing so-called therapeutic desensitization. Such patients should be under close observation, preferably in a hospital. After an initial provocative dose of from 1,000 to 5,000 units, depending on the degree of previously observed sensitivity, penicillin might be given every three hours in the same dose for the first twenty-four hours. Evidences of a reaction should be looked for after each injection and before the next dose is given. On each day following, the dose can be increased until an adequate therapeutic dose is obtained. It is likely that the tendency to lose penicillin sensitivity spontaneously, which has already been noted as frequent among persons with type 1 sensitivity, can be hastened with judicious employment of this technic.

15. O'Donovan, W. J., and Klorfajn, I.: Sensitivity to Penicillin: Anaphylaxis and Desensitization, Lancet 2:444 (Sept. 28) 1946.

SUMMARY AND CONCLUSIONS

Four hundred and six adults and 93 children were tested with penicillin and trichophytin. The reaction to the forty-eight-hour cutaneous test with penicillin was observed to possess clinical significance and practical diagnostic value. The technic of performing and reading this test is described. Other tests are presented and discussed, but their reactions were not found significant.

Of 276 adults who had never had penicillin, 15, or 5.4 per cent, reacted "spontaneously" to the penicillin cutaneous test. Of 168 men, 11, or 6.5 per cent, reacted positively; of 108 women, 4, or 3.7 per cent, showed a positive reaction. Of 65 children, none reacted positively. The "spontaneous" reaction caused by penicillin sensitivity was three times as frequent among those patients who had a positive trichophytin reaction.

Of 136 patients who received penicillin, 32 had cutaneous eruptions. Of these eruptions, 25 were of the urticarial serum-sickness-like type; 7 were of the erythematovesicular, trichophytid type. In 34.2 per cent of all men eruptions developed, whereas they occured in only 8.3 per cent of women.

In this group, all 17 positive reactions to penicillin cutaneous tests occurred in men, or 13.4 per cent of all patients.

Of the 25 patients in the group with urticaria 21 were men and 4, women. Of these patients, 10 had a positive reaction to the cutaneous penicillin test, and 4 had a positive trichophytin reaction; all were men. A previous instance of fungous disease is not considered to play a role in this form of induced sensitivity.

The 7 patients with the erythematovesicular type were men, each of whom had positive reactions to both the penicillin and the trichophytin test. The previous occurrence of fungous disease, which gave rise to penicillin sensitivity resulting in a "spontaneous" positive reaction to penicillin, is considered the basic mechanism of this type of sensitivity.

The delayed reaction to the penicillin cutaneous test is of practical value in the diagnosis of "spontaneous" sensitivity; it serves as an aid in preventing generalized eruptions prior to penicillin therapy and as a guide to dosage for desensitization.

Parenteral and oral methods of desensitization are described, and the results in 8 cases are presented.

140 East Fifty-Fourth Street (22).

ABSTRACT OF DISCUSSION

DR. H. N. COLE, Cleveland: With every new drug, one of the first questions is what reactions follow its use. Only after a period of observation did the dangers from the use of the sulfonamide compounds begin to accumulate. Thus, it is timely that this problem be brought before the Section on Dermatology. Many physicians have seen evidences of sensitization from the use of penicillin. The earliest reactions were apparently of the localized type, due to intimate contact with the drug, and they affected nurses who mixed the prescribed doses for local injections, physicians who handled the drug and, more recently, a chemist and some industrial workers engaged in its manu-

facture. Only later were the generalized systemic reactions studied, and by this time a large literature on the subject has accumulated. The reactions seem to be mostly of the (*a*) urticarial serum-sickness type, rarely accompanied with effusion into the joints, but with symptoms of the skin and mucous membranes resembling angioneurotic edema, and of the lungs resembling an acute attack of asthma and pulmonary edema; (*b*) erythematous eruptions on the skin, which rarely take on the characteristics of erythema multiforme or erythema nodosum, and which even more rarely progress into an exfoliating dermatitis. Occasional cases of fixed eruption have been observed. Thus far, cases of involvement of the hematopoietic system have, fortunately, been almost nonexistent, and this is not strange, for apparently penicillin does not involve the blood-forming organs. I am glad that Dr. Peck and his co-workers emphasized the use of an intradermal dose of 2,000 units, or about 1.2 mg., of crystalline penicillin in 0.1 cc. isotonic solution of sodium chloride, with the reaction read at the end of forty-eight hours, and that they brought out the fact that with a large dose a nonspecific reaction is possible. Their point is well taken that immediate intradermal tests are of no value and that the patch test is useful only in contact cases—when a dry patch test of 100,000 units amorphous penicillin should be employed. They also emphasized that a positive reaction to an intradermal test is helpful in confirming a diagnosis, while a negative reaction does not exclude it. The writers are to be commended for their emphasis on the fact that almost 5 per cent of 276 ward patients who had never received penicillin had a positive reaction after forty-eight hours to the intradermal cutaneous test and for their emphasis on its relation to a positive reaction to the trichophytin test and to the presence of a chronic dermatophytosis. Fungous infections may play a role in producing a sensitivity to penicillin.

DR. E. MYLES STANDISH, Hartford, Conn.: The clinical significance of the forty-eight hour penicillin test now seems to be definitely established. This work also substantiates the observations of other investigators of a definite relation between penicillin and trichophytin antigens. The mechanism of this reaction should receive further exploration. What happens to the trichophytin test in some of the positive penicillin reactors having negative reactions to trichophytin tests? Perhaps an explanation might come from the study of children who have had identified fungous disease. Normal children are negative to both tests. A 25 per cent expectancy of positive cutaneous reactions among adults from penicillin therapy seems high. One out of every 3 men have reactions, in contrast to only 1 of 30 children. Checks on these interesting prognostic observations should be made. That fungous disease plays little or no part in the induction of urticarial sensitivity is contradicted by the figures on children. Children have negative reactions to both tests and are relatively free from fungus. On the basis of the expectancy of urticaria in adults, about 18 per cent of children who had therapy should have positive reactions. There was but 1 child who showed penicillin sensitivity. The forty-eight hour test should be employed to gage the potentiality of reaction in all persons about to receive therapy who have a history of a fungous disease or who present significant fungous infection. Elective therapy should be delayed until the patient is desensitized, or else therapy should proceed with caution. Value lies in utilization of the drug during desensitization of persons who have a severe penicillin reaction. Desensitization should be carried out in the hospital, although oral desensitization apparently can be done outside the hospital. Dermatologists should apprise members of the medical profession of the dangerous potentialities of the many reactions. The dermatophytids, and possibly a generalized exfoliating dermatitis, might be prevented by employing this forty-eight hour test. I believe also in warning against shifting the type of penicillin therapy, except in case of extreme necessity and with all safeguards, when any of these dermatologic signs are present. Reactions are apparently decreasing since the shift to the use of crystalline penicillin was made. Since crystalline penicillin *per se* can sensitize persons, there may be an increase in positive reactors as the therapy proceeds, just as with sulfonamide therapy. When the antihistamine drugs and calcium gluconate fail, as they often do, one should not hesitate to give procaine hydrochloride intravenously, but, of course, cautiously and only after a preliminary test. One's control in this administration is extremely delicate.

DR. HARRY M. ROBINSON, Baltimore: Dr. Peck and his associates have discussed the relation of the patch test and the intradermal test, principally the latter, to penicillin reactions. I should like to attack that problem by the hind-before method; that is, we discuss the inadvisability of using penicillin as a topical application, but no one warns the nurse or the pharmacist about protection against reactions occurring in preparation of the penicillin. Two of our nurses, which is a small number among the many nurses in our hospital who prepare this drug, had a serious dermatitis from preparing penicillin. If they had a disease requiring the administration of penicillin, I am afraid their reactions would be serious.

DR. LEON GOLDMAN, Cincinnati: I am sorry that Dr. Peck could not discuss the eczematoid contact phase because, as the other speakers have indicated, it is much more important for the dermatologist, and it also is, perhaps, a "cleaner" method of analysis than the intradermal test, for the patch test is easier to use and interpret. I should like to know how many of Dr. Peck's patients, especially those with the erythematovesicular phase, had eczematoid contact sensitivity, either potential or actual. Do his remarks about children and their fungous infections refer also to children who have had trichophytides associated with fungous infection of the scalp? I should like to ask whether any synthetic penicillin has been available for cutaneous testing, and whether it would help to clear up some of these problems. Of course, the difficulty for the practicing physician, as Dr. R. L. Kile mentioned the other day, is that he cannot wait until the tuberculin type of reaction becomes evident; he is asked for an opinion when penicillin is needed as an emergency measure. If the immediate erythema-edema reaction could be developed to be specific, it would be of great practical value.

DR. E. E. MANDEL, Chicago: Permit me to relate briefly the apparently unique case of a girl 3½ years of age in whom a systemic sensitivity reaction developed more than three weeks after the administration of penicillin in oil and wax, which constituted her first contact with this antibiotic substance. She had received 150 000 units of the Romansky preparation daily for three days because of a severe infection of the upper respiratory tract. Recovery was prompt. About one week after the first injection, painful infiltrated lesions at the sites of the injections developed, which subsided slowly. Twenty-two days after the last injection of penicillin in oil and wax, an acute illness set in, characterized by urticaria, adenopathy and fever, and eosinophilia (24 per cent), with a total white cell count of 10,000 per cubic millimeter and a fairly normal red cell count. After six days of severe malaise and itching, this illness gradually subsided. It was undoubtedly severer and lasted longer than the original disease for which the child had received penicillin. Two months later, she was subjected to scratch tests with white wax U. S. P. and peanut oil supplied by the company which had manufactured the penicillin preparation she had received. She was given scratch tests with that same penicillin preparation and with an aqueous solution of 15,000 units of penicillin per cubic centimeter; she was also tested with this solution intradermally. No reaction was observed. Nevertheless, there can be little doubt that the allergic disease as described was a response to the medication. The child had never before shown any sign of allergy, nor did she receive, either during or preceding that episode any other medication, except for acetylsalicylic acid and diphenhydramine hydrochloride, both of which afforded some relief. A thorough search of the pertinent literature revealed only 1 case of penicillin sensitivity; it was first noticed about twenty days after the last administration of the drug. The patient was an adult and an aqueous solution of penicillin was used (Kolodny, M. H., and Denhoff, E.: Reactions in Penicillin Therapy, J. A. M. A. **130**: 1058 [April 20] 1946). Administration of penicillin in oil and wax is followed by untoward reactions so frequently in pediatric experience that some pediatricians refuse to employ it. No other case of such delay in the systemic reaction however, has come

to my attention. Systemic sensitization may have developed here at the time of the local reaction over the sites of injections.

DR. MARION B. SULZBERGER, New York: Any one who has been privileged to study and to participate in the work on the immunology of fungi and their extracts must come to the realization that the advances which have been made were in the main due to studies by dermatologists. It is, therefore, comprehensible that dermatologists again have led to the better understanding of the immunology of penicillin reactions. These recent advances are all based on earlier studies with allergenic fungi and logically come from that group of investigators which best understands the methods and the problems of fungous immunology—in other words, from the dermatologic immunologists. The mechanism of these untoward reactions to penicillin has been largely elucidated by the studies of well trained dermatoimmunologists, as represented by the capable Dr. Peck and his group. All down the line the resemblance between tricophytin hypersensitivity and its manifestations and penicillin hypersensitivity and its manifestations is almost uncanny. The pictures can be transposed or superimposed without one's being able to distinguish between them so far as the type of cutaneous reaction is concerned. The untoward manifestations which penicillin causes, the erythema-multiforme-like reactions, the urticarias, the morbilliform reactions, the fevers, the glandular swellings, the arthritides and, most important, the eczematous form of reaction exemplified in the "id" type of response, have all long ago been carefully and well described in relation to pathogenic cutaneous fungi and recognized as due to trichophytin hypersensitivity. Moreover, the fact that immediate urticarial reactions are rare with penicillin provides another resemblance to the trichophytin test. There, too, with the exception of certain species of fungi (Trichophyton purpureum), as Dr. George M. Lewis and his co-workers have shown), the urticarial reaction is generally absent in cutaneous test, whereas the forty-eight to seventy-two hour delayed type and the eczematous form of reactions are commonly present. Now, Dr. Peck comes forward with another analogy. As Dr. Fred Wise and I were first able to show in 1932 (Ringworm and Trichophytin: Newer Developments, Including Practical and Theoretical Considerations, J. A. M. A. 99:1759 [Nov. 19] 1932), one can reduce the threshold of cutaneous sensitivity to the eczematous or eczematoid type of trichophytin reactions by repeated intracutaneous injections of trichophytin. Dr. Peck now shows for the first time that one can do that also with penicillin in the delayed type of penicillin cutaneous reactions. Another new fact emerges from this study, namely, the high incidence of cutaneous reactions to penicillin in men as compared with that in women.

DR. SHEPPARD SIEGAL, New York: I want to thank the discussants for their stimulating remarks concerning our paper. In reply to Dr. Goldman, we had just 3 instances of reaction in children, each of the urticarial type. He is correct in pointing out the practical difficulty of using a test which does not show a positive reaction until twenty-four or forty-eight hours later to a drug that often is needed immediately. We stress the value of the test when the patient has had a previous reaction and one wants to know whether he is still sensitive, or, for example, when one wishes to know beforehand whether the patient falls into the group with spontaneous sensitivity. When therapy must be started immediately, it might still be worth while to do the cutaneous test, for it may serve as a guide to reactions that may arise subsequently. I note Dr. Peck did not have time to mention one or two other things concerning spontaneous sensitivity and the delayed cutaneous reaction to penicillin. First, spontaneous sensitivity, apparently, lasts a long time. For example, we had at least 2 patients whom we tested after intervals of twelve and eighteen months, respectively, and they still had a strongly positive cutaneous reaction to penicillin. Desensitization, in some instances at least, is successful not only temporarily but over a long period. For example, 2 patients whom we desensitized were again tested several months later and were found to have a negative cutaneous reaction. One of them was still able to take large doses of penicillin several months after we had successfully desensitized him. Here, again, I want to emphasize that I am talking about a patient with type 2 sensitivity with the erythematovesicular form of reaction. We have seen some severe reactions following administration of penicillin in oil and wax, characterized chiefly by an intense local, almost cellulitic, response, with marked induration of the buttocks, often associated with fever and sometimes with urticaria. This form is probably related to the type 1 reactions we have described. It occurs after a delayed incubation period, and often without an associated positive cutaneous reaction to penicillin, whether of the delayed or the immediate type. Another point I should like to emphasize is that reactions occur whether the penicillin is given orally, by inhalation or by injection. In 1 of our patients who had received penicillin by aerosol, a severe generalized urticaria developed about nine days after the inhalation therapy, while another patient responded promptly with a generalized erythematovesicular reaction, just as in patients after intramuscular injection.

STREPTOMYCIN IN TOPICAL THERAPY

I. Its Sensitizing Property

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and
MILTON D. FELDMAN, M.D.
Cincinnati

Up to the present time streptomycin has not been used topically as extensively as penicillin, chiefly because of the limitations, expense and availability. Perhaps, also, the reactions from topically administered penicillin, after the initial enthusiasm, may be another factor in determining the reluctance to use streptomycin topically. In the field of dermatology, streptomycin has been used topically by Sulzberger and Baer,[1] Calloway[2] and Senturia and Broh-Kahn.[3] There have been a few reports of the reactions from topically employed streptomycin. These reports have been infrequent also perhaps because of infrequent use. Nichols and Herrell[4] indicated that contact dermatitis may result in those handling streptomycin. A case was reported by Feldman[5] in which an eczematous type of sensitivity was proved in patch tests to be due to the streptomycin. Strauss and Warring[6] reported 4 cases of clinical epidermal sensitivity to streptomycin and 2 additional cases of subclinical but demonstrable sensitization proved by patch tests. These instances of sensitization occurred in a group of 12 nurses who came into contact with the drug while they were preparing solutions for administration to patients with tuberculosis.

In an effort to evaluate the actual and potential sensitizing qualities of streptomycin, a series of testing technics were used. Patients were subjected to patch tests to streptomycin ointment of 5,000 units per gram in a cream base. The ointment was considered stable at room temperature for several weeks. A number of these patients were given repeat tests in two weeks. Of the first series, 48 were Negro, and of the second series 20 were Negro. Eight patients of the first series had received parenteral streptomycin therapy.

In an effort also to duplicate the conditions under which penicillin was studied, a certain number of

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Dr. Feldman is a Bristol Fellow in Antibiotics.

The streptomycin ointment was furnished by Bristol Laboratories, Inc.

From the Department of Dermatology and Syphilology of the College of Medicine of the University of Cincinnati.

1. Sulzberger, M. B., and Baer, R. A.: Yearbook of Dermatology and Syphilology, Chicago, The Year Book Publishers, 1947, p. 15.
2. Calloway, J. L.: Pseudomonas Aeruginosa Infection of the Ear Treated with Streptomycin, Arch. Dermat. & Syph. 55:257 (Feb.) 1947.
3. Senturia, B. H., and Broh-Kahn, R. H.: The Use of Streptomycin in the Treatment of Diffuse External Otitis, Ann. Otol., Rhin. & Laryng. 56:181 (March) 1947.
4. Nichols, D. R., and Herrell, W. E.: Streptomycin: Its Clinical Uses and Limitations, J.A.M.A. 132:1260 (Sept. 28) 1946.
5. Feldman, M. D.: Contact Dermatitis from the Topical Application of Streptomycin Ointment, to be published.
6. Strauss, M. J., and Warring, F. C., Jr.: Contact Dermatitis from Streptomycin, J. Invest. Dermat. 9:13 (July) 1947; Epidermal Sensitization to Streptomycin, ibid. 9:99 (Aug.) 1947.

mucous membrane tests were done, both of the buccal mucosa and the vaginal mucosa. The vaginal mucosa tests were done because of the investigative work on the use of suppositories containing penicillin by Goldman and Feldman.[7]

Because of previous work with the artificial induction of penicillin dermatitis on the face, some experiments were done in a similar manner with streptomycin.

From these preliminary investigative studies of a small series of patients, it appears that streptomycin is a poor sensitizing agent and perhaps much less active than penicillin.

Does clinical experience bear out these investigative studies? In our series of almost 300 patients treated with streptomycin ointment, there have been 3 cases of eczematous contact hypersensitivity proved by patch tests. The condition was suspected in an additional case, but patch tests were not done.

REPORT OF CASES

CASE 1.—An elderly white woman was hospitalized because of stasis dermatitis on which was superimposed secondarily infected erosions and ulcerations. She was treated with streptomycin ointment dressings daily and showed initial improvement. However, on about the twelfth day of treatment, there appeared severe eczematoid dermatitis on the cutaneous areas where the ointment had been used. Reactions to patch tests with both streptomycin ointment and solution were strongly positive.

CASE 2.—A young white man was seen in the hospital because of chancriform pyoderma affecting the arm. Previous treatment, consisting of compresses and application of ammoniated mercury ointment, were of no avail, and streptomycin ointment was prescribed. When this had been used about four or five days, there appeared acute erythematous, edematous and vesicular dermatitis about the margin of the ulcer. Streptomycin therapy was discontinued, and patch tests were performed. The reactions were strongly positive to both streptomycin ointment and streptomycin solution. Reactions to patch tests with penicillin were also positive; however, the drug was later given parenterally without reaction. The penicillin contact tests were not repeated.

CASE 3.—A middle-aged white woman with otitis externa was treated with streptomycin ointment. After a short while the dermatitis flared, and the skin of the eyelids, genitalia, arms and buttocks was involved with contact dermatitis. Reactions to patch tests with streptomycin were strongly positive.

Therefore, there are 3 proved cases in a total of almost 300. As topical streptomycin therapy is continued for longer periods of time, it is probable that more cases will be found.

An additional case which is not included in this series was that of a nurse in whom severe generalized dermatitis developed from streptomycin administered to patients. Her course was prolonged, and attempts at hyposensitization were difficult, for as little as 10 units would give a focal reaction also.

TABLE 1.—*Results of Patch Tests with Streptomycin Ointment, 5,000 Units per Gram*

Total Number of Patients	Reaction to First Test		Total Number of Patients	Reaction to Retesting in Two Weeks	
	Positive	Negative		Positive	Negative
212	0	212	129	0	129

TABLE 2.—*Results of Buccal Mucosa Contact Tests with Streptomycin Powder*

Number of Patients	Hours of Contact	Reactions	
		Positive	Negative
7	2	0	7
7	4	0	7
12	12-14	0	12

TABLE 3.—*Results of Vaginal Mucosa Contact Tests with Streptomycin Ointment Containing 5,000 Units per Gram*

Number of Patients	Hours of Contact	Reactions	
		Positive	Negative
6	1 hour twice a day for 48 hours	0	6
19	48 hours (cont.)	0	19

TABLE 4.—*Results of Facial Sensitization Attempts with Streptomycin Ointment Containing 5,000 Units per Gram*

Number of Patients	Applications to Face		Reactions	
	No. per Day	Total Days	Positive	Negative
17	3-4	5-24	0	17

COMMENT

To date, streptomycin ointment has been observed to be of value in superficial infections with organisms which are sensitive to the drug. These types of infections include, of course, impetigo, pustular folloculitis, ecthyma and nonfungous external otitis. In general, the principles of topical streptomycin therapy parallel those for topical penicillin therapy as detailed by Goldman, Suskind and Friend.[8]

If it is established that streptomycin administered topically is less sensitizing than penicillin administered topically, then streptomycin would be preferred when topical therapy with antibiotics is desired. Moreover, the chances are certainly less of subsequent parenteral use of streptomycin than of penicillin. Tyrothricin, used topically, in our opinion, is a much less active antibiotic. This, too, can occasionally produce local reactions.[9] Certainly, more comparative and critical trials of the various antibiotics, the older and tried and the newer chemotherapeutic agents for the topical therapy of superficial infections of the skin, are needed.

CONCLUSIONS

Results of preliminary investigative work from clinical trial, patch tests and tests of the buccal and vaginal mucosa, indicate that topically administered streptomycin is a sensitizing agent and that it is perhaps less sensitizing than topically administered penicillin. Three proved cases of eczematous hypersensitivity to topical streptomycin and one case of severe dermatitis in a nurse are reported from our clinical series. The frequency and severity of this type of reaction to streptomycin will be determined by greater experience.

Preliminary clinical investigative studies in almost 300 cases indicate that stable ointment preparations of streptomycin are effective in the treatment of superficial pyogenic infections.

7. Goldman, L., and Feldman, M. D.: Contact Testing of the Vagina with Vaginal Suppositories Containing Penicillin, J. Invest. Dermat. 9:115 (Sept.) 1947.

8. Goldman, L.; Suskind, R. R., and Friend, F.: II. The Principles of Local Therapy with Penicillin Ointment Mixtures, Arch. Dermat. & Syph. 55:793 (June) 1947.

9. Feldman, M. D.; Goldman, L., and Altemeir, W. A.: Polyvalent Eczematous Hypersensitivity to Various Antibiotics Induced by Topical Tyrothricin, to be published.

HUMAN PARABIOTIC PYGOPAGUS TWINS WITH HYPERTENSION

Report of a Case with Clinical, Psychologic and Endocrinologic Observations

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Pygopagy, the state of twins being conjoined at the sacrum, has been reported in human beings on an average of three times a century since 1100 A.D.[1] Nature thus provides a rare occasion for studying humoral influences, transmitted from one twin to the other through communicating circulations. Observations are feasible on the humoral transmission of substances influencing the emotional state, of glandular secretions and of disease in situations where one of the twins is afflicted. Margaret and Mary provided a unique situation, for Margaret had grade 2 hypertension, while Mary had labile hypertension, normal at rest. Margaret also had bladder calculi and a uterine leiomyoma. The rarity of observations on human conjoined twins, the anatomic and physiologic knowledge acquired from such a study and the significance of our observations relative to the similarity or dissimilarity of pygopagus twins have prompted us to write this report.

REPORT OF A CASE

Margaret and Mary, aged 34 years, conjoined at the sacrum, entered the New England Deaconess Hospital Dec. 3, 1946. Mary (right in figure 1*A*, left in figure 1*B*) was asymptomatic, while Margaret had hypertension, which had been discovered first five months previously, and complained of urinary frequency, which had been present intermittently for years, and pain in the lower part of the abdomen, which was mild, constant and not related to bowel, urinary or menstrual functions.

At birth, the twins' combined weight was 7 pounds (about 3,175 Gm.). Delivery was uncomplicated, but two months premature according to their mother. She denied having had any illness while carrying them, and her only other pregnancy resulted in a normal child ten years later. Details regarding the mechanism of labor or structure of the placenta were unobtainable.

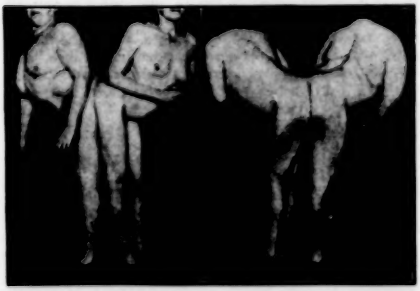

Fig. 1.—*A*, anterior view of the pygopagus twins, with Mary on the left and Margaret on the right. *B*, posterior view.

At the age of 3 the twins entered the Boston Children's Hospital,[2] where operation to separate them was considered, but not done since it was found that their spinal canals communicated. At this time a "systolic blow" was detected in Margaret's heart. During childhood they had mumps, measles, pertussis and chickenpox at the same time. They were instructed by private tutors and, when older, traveled widely with circuses. At 21, Margaret's intravenous pyelogram showed renal calculi on the right side. Two months later, at the Peter Bent Brigham Hospital,[3] a cystoscopic examination with retrograde pyelograms showed no calculi, but demonstrated mild cystitis and narrowing of the urethra, requiring dilation. Margaret's blood pressure was 150 mm. systolic and 90 mm. diastolic, and Mary's was 150 mm. systolic and 94 mm. diastolic. The temperature charts made during both of these hospital sojourns, one in infancy and the other in adulthood, reveal identical curves in both sisters. Menarche and menstruation were similar in each as far as could be determined in view of the difficulty of telling which sister was menstruating, since there was practically a common vagina. Their mother stated that they started to menstruate at the age of 13 and that they have only one period a month, sometimes lasting four to five days and occasionally nine to ten days. Only Margaret has any menstrual discomfort, and this is mild.

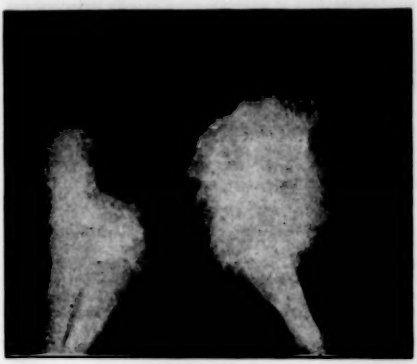

Fig. 2.—Roentgenograms of the twin's juncture (Mary on the right and Margaret on the left).

The family history is not contributory except that their mother has hypertension with systolic pressure up to 240 mm. of mercury.

Their union resulted from fusion of anomalous sacral bones, as shown in figure 2, and of perineums, the surface anatomy of which appears in figure 3. The urethras were located ½ inch (about 1.3 cm.) apart; vaginal openings were barely separated by a thin septum, with the medial labia absent and the lateral set fused, and the anus was a single orifice. Roentgenologic studies after an enema with barium sulfate showed separate sigmoid colons entering the common rectum 3 inches (about 7.5 cm.) above the anus. A pelvic examination performed under anesthesia demonstrated separate uteri. Tests for cutaneous sensation in the immediate vicinity of the junction between them were perceived by both. In standing, Margaret's trunk inclined to the left and Mary's to the right. This position caused the outer arm and breast of each to hang in a more dependent position than its fellow and may account for the larger size of these outer appendages.

Margaret was thin, high strung and apprehensive, while her sister was stout, calm and placid. Their mother stated that they had always been different; Margaret was usually concerned about her health and finances, and Mary was easy going

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From the Department of Internal Medicine, The Lahey Clinic.

1. Gould, G. M., and Pyle, W. L.: Anomalies and Curiosities of Medicine, Philadelphia, W. B. Saunders Co., 1901.

2. Information was obtained through Dr. Charles Brugler, Superintendent of the Children's Hospital, Boston.

3. Information was obtained through Dr. Norbert Wilhelm, Superintendent of the Peter Bent Brigham Hospital, Boston.

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and carefree. The Otis Intelligence Test gave them each intelligence quotients of approximately 80. The Minnesota Multiphasic Personality Inventory showed Margaret to be not definitely in the neurotic range, but slightly higher than average in the hypochondriac, depressive and hysteria scales, and Mary was shown to be normal. In the Rorschach Test Margaret showed decided "color shocks," indicative of manifest anxiety, while Mary's "shadow reactions" indicated latent anxiety.

The only other abnormal physical observations of note were a small leiomyoma of the uterus and grade 2 apical systolic murmur in Margaret and hypertension in both. No signs of a leiomyoma were observed clinically in Mary. Figure 4 is a chart of their blood pressure readings recorded by nurses every three hours for ten days and is representative of the behavior of their blood pressures during the entire period of hospitaliza-

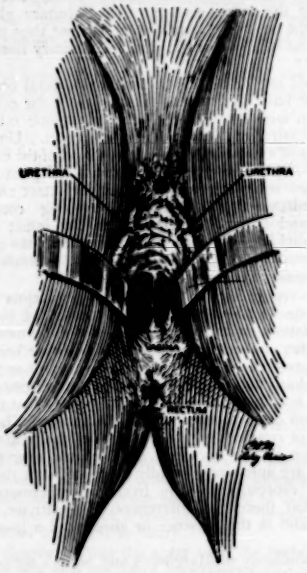

Fig. 3.—Surface anatomic structure of the perineum.

tion. Figure 5 shows the changes in blood pressure following administration of 3 cc. of tetraethyl ammonium chloride ("etamon chloride") intravenously and a portion of the temperature chart just before and after a slight febrile reaction from cystoscopy. It is to be noted that the blood pressure curves of each follow in general the same trends except at several points, which could have been due to errors in determinations; one apparent discrepancy (A) resulted because the blood pressure of only 1 patient was taken. The portion of their temperature charts presented shows a striking similarity during a febrile reaction.

The results of the following laboratory tests were normal and similar in each sister: urinalysis, blood cell counts, chemical determinations in the blood for sugar, nonprotein nitrogen, cholesterol, calcium, alkaline and acid phosphates, phosphorus and renin;[4] results of serologic tests for syphilis, electrocardiograms, electroencephalograms and roentgenograms of the chest were also normal. Arm to tongue circulation time with triketocholanic acid ("decholin") was 15 seconds for Margaret and 8 for Mary.

4. Reported by Dr. Lewis Dexter, Peter Bent Brigham Hospital, Boston.

The cold pressor test, mecholyl test and sodium isoamylethylbarbiturate ("sodium amytal") test for lability of blood pressure were done individually in each and recorded simultaneously in both. In none of the tests to be reported was there evidence of definite effect on the opposite twin. Immersing Margaret's hands in ice water for three minutes caused her blood pressure to rise from 190 to 230 mm. systolic and from 110 to 140 mm.

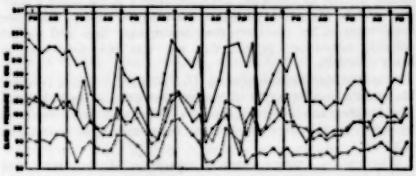

Fig. 4.—Record of blood pressures simultaneously determined day and night for ten days (Margaret's, the unbroken line; Mary's, the broken line).

diastolic. Mary's blood pressure, after immersing her hands in ice water, went from 154 to 180 mm. systolic and from 100 to 136 mm. diastolic. Following the subcutaneous injection of 15 mg. of "mecholyl," Margaret's blood pressure dropped from 220 mm. systolic and 140 mm. diastolic to imperceptible levels.

Results of Tests

Tests	Results	
	Margaret	Mary
Urea clearance test (percentage)..	85%	100%
Phenolsulfonphthalein test		
(a) 1 cc. given intravenously to Margaret	25% in 30 min. 12% in 60 min.	15% in 30 min. 10% in 60 min.
(b) 1 cc. given intravenously to Mary	6% in 30 min. 10% in 60 min.	80% in 30 min. 15% in 60 min.
24 hour sample of urine (Amounts in grams per 100 cc.)		
Urea	3.7 to 4.6	4.4 to 5.6
Sodium chloride	2.3 to 2.5	7.3 to 11.5

Mary's pressure responded to this drug by a fall from 158 to 110 systolic and from 90 to 80 diastolic. Margaret's lowest recorded pressure during the twelve hours following administration of about 0.6 Gm. of sodium isoamylethylbarbiturate by mouth was 160 mm. systolic and 100 mm. diastolic, and Mary's, after this test was repeated, was 100 mm. systolic and 60 mm.

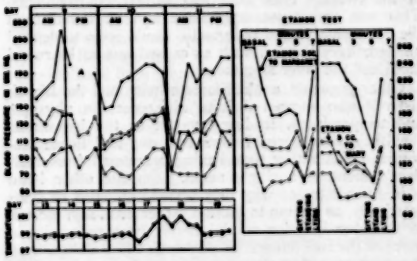

Fig. 5.—Results of the test with tetraethyl ammonium chloride and a representative sample of the temperature chart.

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Tests for renal function showed impairment in Margaret, as is shown in the results summarized in the table. In performing the phenolsulfonphthalein test, urine samples were obtained by catheter from each bladder.

HUMAN PARABIOTIC PYGOPAGUS TWINS WITH HYPERTENSION

Report of a Case with Clinical, Psychologic and Endocrinologic Observations

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Pygopagy, the state of twins being conjoined at the sacrum, has been reported in human beings on an average of three times a century since 1100 A.D.[1] Nature thus provides a rare occasion for studying humoral influences, transmitted from one twin to the other through communicating circulations. Observations are feasible on the humoral transmission of substances influencing the emotional state, of glandular secretions and of disease in situations where one of the twins is afflicted. Margaret and Mary provided a unique situation, for Margaret had grade 2 hypertension, while Mary had labile hypertension, normal at rest. Margaret also had bladder calculi and a uterine leiomyoma. The rarity of observations on human conjoined twins, the anatomic and physiologic knowledge acquired from such a study and the significance of our observations relative to the similarity or dissimilarity of pygopagus twins have prompted us to write this report.

REPORT OF A CASE

Margaret and Mary, aged 34 years, conjoined at the sacrum, entered the New England Deaconess Hospital Dec. 3, 1946. Mary (right in figure 1*A*, left in figure 1*B*) was asymptomatic, while Margaret had hypertension, which had been discovered first five months previously, and complained of urinary frequency, which had been present intermittently for years, and pain in the lower part of the abdomen, which was mild, constant and not related to bowel, urinary or menstrual functions.

At birth, the twins' combined weight was 7 pounds (about 3,175 Gm.). Delivery was uncomplicated, but two months premature according to their mother. She denied having had any illness while carrying them, and her only other pregnancy resulted in a normal child ten years later. Details regarding the mechanism of labor or structure of the placenta were unobtainable.

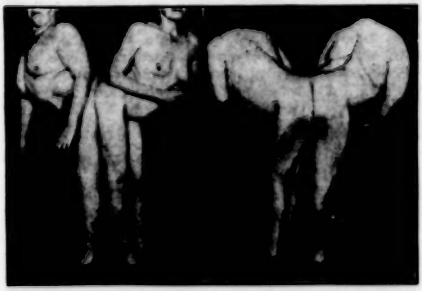

Fig. 1.—*A*, anterior view of the pygopagus twins, with Mary on the left and Margaret on the right. *B*, posterior view.

At the age of 3 the twins entered the Boston Children's Hospital,[2] where operation to separate them was considered, but not done since it was found that their spinal canals communicated. At this time a "systolic blow" was detected in Margaret's heart. During childhood they had mumps, measles, pertussis and chickenpox at the same time. They were instructed by private tutors and, when older, traveled widely with circuses. At 21, Margaret's intravenous pyelogram showed renal calculi on the right side. Two months later, at the Peter Bent Brigham Hospital,[3] a cystoscopic examination with retrograde pyelograms showed no calculi, but demonstrated mild cystitis and narrowing of the urethra, requiring dilation. Margaret's blood pressure was 150 mm. systolic and 90 mm. diastolic, and Mary's was 150 mm. systolic and 94 mm. diastolic. The temperature charts made during both of these hospital sojourns, one in infancy and the other in adulthood, reveal identical curves in both sisters. Menarche and menstruation were similar in each as far as could be determined in view of the difficulty of telling which sister was menstruating, since there was practically a common vagina. Their mother stated that they started to menstruate at the age of 13 and that they have only one period a month, sometimes lasting four to five days and occasionally nine to ten days. Only Margaret has any menstrual discomfort, and this is mild.

Fig. 2.—Roentgenograms of the twin's juncture (Mary on the right and Margaret on the left).

The family history is not contributory except that their mother has hypertension with systolic pressure up to 240 mm. of mercury.

Their union resulted from fusion of anomalous sacral bones, as shown in figure 2, and of perineums, the surface anatomy of which appears in figure 3. The urethras were located ½ inch (about 1.3 cm.) apart; vaginal openings were barely separated by a thin septum, with the medial labia absent and the lateral set fused, and the anus was a single orifice. Roentgenologic studies after an enema with barium sulfate showed separate sigmoid colons entering the common rectum 3 inches (about 7.5 cm.) above the anus. A pelvic examination performed under anesthesia demonstrated separate uteri. Tests for cutaneous sensation in the immediate vicinity of the junction between them were perceived by both. In standing, Margaret's trunk inclined to the left and Mary's to the right. This position caused the outer arm and breast of each to hang in a more dependent position than its fellow and may account for the larger size of these outer appendages.

Margaret was thin, high strung and apprehensive, while her sister was stout, calm and placid. Their mother stated that they had always been different; Margaret was usually concerned about her health and finances, and Mary was easy going

Dr. Younghusband is a Fellow in Internal Medicine.
From the Department of Internal Medicine, The Lahey Clinic.

1. Gould, G. M., and Pyle, W. L.: Anomalies and Curiosities of Medicine, Philadelphia, W. B. Saunders Co., 1901.

2. Information was obtained through Dr. Charles Brugler, Superintendent of the Children's Hospital, Boston.

3. Information was obtained through Dr. Norbert Wilhelm, Superintendent of the Peter Bent Brigham Hospital, Boston.

and carefree. The Otis Intelligence Test gave them each intelligence quotients of approximately 80. The Minnesota Multiphasic Personality Inventory showed Margaret to be not definitely in the neurotic range, but slightly higher than average in the hypochondriac, depressive and hysteria scales, and Mary was shown to be normal. In the Rorschach Test Margaret showed decided "color shocks," indicative of manifest anxiety, while Mary's "shadow reactions" indicated latent anxiety.

The only other abnormal physical observations of note were a small leiomyoma of the uterus and grade 2 apical systolic murmur in Margaret and hypertension in both. No signs of a leiomyoma were observed clinically in Mary. Figure 4 is a chart of their blood pressure readings recorded by nurses every three hours for ten days and is representative of the behavior of their blood pressures during the entire period of hospitalization. Figure 5 shows the changes in blood pressure following administration of 3 cc. of tetraethyl ammonium chloride ("etamon chloride") intravenously and a portion of the temperature chart just before and after a slight febrile reaction from cystoscopy. It is to be noted that the blood pressure curves of each follow in general the same trends except at several points, which could have been due to errors in determinations; one apparent discrepancy (A) resulted because the blood pressure of only 1 patient was taken. The portion of their temperature charts presented shows a striking similarity during a febrile reaction.

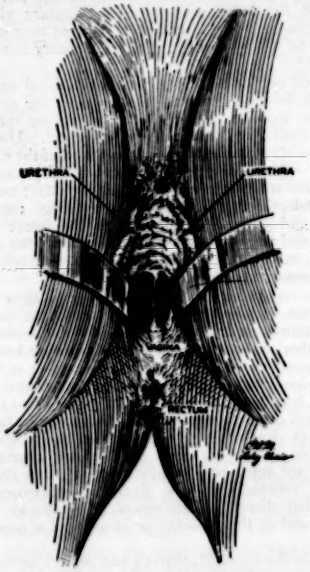

Fig. 3.—Surface anatomic structure of the perineum.

The results of the following laboratory tests were normal and similar in each sister: urinalysis, blood cell counts, chemical determinations in the blood for sugar, nonprotein nitrogen, cholesterol, calcium, alkaline and acid phosphates, phosphorus and renin;[4] results of serologic tests for syphilis, electrocardiograms, electroencephalograms and roentgenograms of the chest were also normal. Arm to tongue circulation time with triketocholanic acid ("decholin") was 15 seconds for Margaret and 8 for Mary.

4. Reported by Dr. Lewis Dexter, Peter Bent Brigham Hospital, Boston.

The cold pressor test, mecholyl test and sodium isoamylethylbarbiturate ("sodium amytal") test for lability of blood pressure were done individually in each and recorded simultaneously in both. In none of the tests to be reported was there evidence of definite effect on the opposite twin. Immersing Margaret's hands in ice water for three minutes caused her blood pressure to rise from 190 to 230 mm. systolic and from 110 to 140 mm. diastolic. Mary's blood pressure, after immersing her hands in ice water, went from 154 to 180 mm. systolic and from 100 to 136 mm. diastolic. Following the subcutaneous injection of 15 mg. of "mecholyl," Margaret's blood pressure dropped from 220 mm. systolic and 140 mm. diastolic to imperceptible levels.

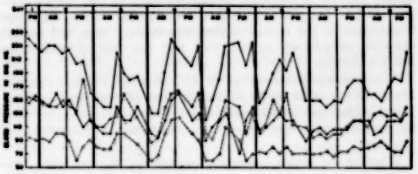

Fig. 4.—Record of blood pressures simultaneously determined day and night for ten days (Margaret's, the unbroken line; Mary's, the broken line).

Results of Tests

Tests	Results	
	Margaret	Mary
Urea clearance test (percentage)..	65%	100%
Phenolsulfonphthalein test		
(a) 1 cc. given intravenously to Margaret	25% in 30 min. 12% in 60 min.	15% in 30 min. 10% in 60 min.
(b) 1 cc. given intravenously to Mary	6% in 30 min. 10% in 60 min.	50% in 30 min. 15% in 60 min.
24 hour sample of urine (Amounts in grams per 100 cc.)		
Urea	3.7 to 4.6	4.4 to 5.6
Sodium chloride	2.3 to 2.5	7.3 to 11.5

Mary's pressure responded to this drug by a fall from 158 to 110 systolic and from 90 to 80 diastolic. Margaret's lowest recorded pressure during the twelve hours following administration of about 0.6 Gm. of sodium isoamylethylbarbiturate by mouth was 160 mm. systolic and 100 mm. diastolic, and Mary's, after this test was repeated, was 100 mm. systolic and 60 mm. diastolic. Oddly, in either instance only the one given the sodium isoamylethylbarbiturate slept, while the other remained wide awake.

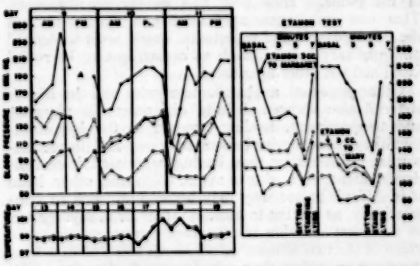

Fig. 5.—Results of the test with tetraethyl ammonium chloride and a representative sample of the temperature chart.

Tests for renal function showed impairment in Margaret, as is shown in the results summarized in the table. In performing the phenolsulfonphthalein test, urine samples were obtained by catheter from each bladder.

After 30 cc. of iodopyracet injection was given intravenously to Margaret the renal calices were not visualized by roentgenogram, and the bladder showed only poor concentration of the dye, while Mary's calices and bladder on the right side were well visualized. Later the same amount of iodopyracet injection administered to Mary gave good visualization of Mary's bladder and barely outlined Margaret's bladder. Two calculi, approximately 2.5 cm. in diameter, were discovered in the latter's bladder. While Margaret, with the severer hypertension, had some impairment of her renal function, her urinary urea and sodium chloride estimations proved that she was not dependent on Mary's kidneys.

A cystoscopic examination by Dr. Howard Trafton revealed Margaret's urethra to be narrowed, and dilation was required. The bladder was mildly inflamed. The stones were removed by crushing and were observed to be composed of urates and oxalates.

Whether to attempt surgical separation of the twins was settled by their flat refusal even to consider this. They had become so adjusted to being joined together that separation was unthinkable. In their opinion this would be no less than amputation of a personal appendage. The members of the orthopedic and surgical departments agreed that surgical separation was not feasible, because insurmountable difficulties would be met in the lumbosacral region where the spinal canals were known to communicate. Probable damage to a common cauda equina would result in complications of the bowel and bladder of a serious nature. Furthermore, colostomy in one, and probably in both, would be necessary, because of the single rectum. Should one die, however, operation would be urgent to save the life of the other. The neurosurgical consultant expressed the belief that it would be possible to perform a splanchnicectomy on Margaret if such were indicated for relief of hypertension.

COMMENT

Evidence for intercommunication of the sisters' vascular systems was obtained from the simultaneous excretion from both of phenolsulfonphthalein and iodopyracet injection. The degree of this vascular exchange was not exactly determined, but appeared to be moderate in view of the concentration of dye materials in the opposite twin. Had tagged red blood cells been available, this could have been quantitated.

That factors other than humoral transmission predominate and that humoral influences play little or no part in mediating emotional states are brought out by the diametrically opposite temperaments and reactions of the twins. They both had similar environments. That one was tense, aggressive and worrisome and the other passive and phlegmatic would seem to depend on hereditary factors, such as caused one to be round faced and the other long faced.

Other pygopagi, as the Siamese twins and the Blazek sisters,[5] also showed definite differences in physique and temperament, lending support to the hypothesis that they were derived from two ova and hence dissimilar twins rather than having originated from maldevelopment of a single ovum. On the other hand it is difficult to see why they become attached so symmetrically, as sacrum to sacrum rather than, say, sacrum to shoulder, if fusion results merely from proximity in utero of the two fetuses, or why such twins always have the same sex unless they arise from a single ovum. The pathogenesis remains unknown and awaits further observation. More details regarding placentas are especially important since such information is lacking in most reported cases.

That menstruation began in both at the same age and continued to occur practically simultaneously requires explanation, for at first glance it would be expected that, since each had a pituitary gland, there would be different menstrual cycles at one time or another. The self-regulatory effect of ovarian hormones acting on the pituitary gland, however, may explain this menstrual similarity. Follicular stimulating hormone causes production of estrogen, which in turn inhibits further follicular stimulating hormone secretion, while stimulating secretion of pituitary luteinizing hormone. The latter causes outpouring of progesterone from the corpora lutea, which in turn inhibits further luteinizing hormone production, but also apparently stimulates secretion of follicular stimulating hormone. Because of intercommunicating circulations between the twins, each of their pituitary glands is under the control of this system, so that they probably behave as if only a single mass of pituitary tissue were present.[6]

Should one of the sisters require bilateral oophorectomy or have natural menopause before the other, the situation would resemble that of parabiotic rats when one is castrated and the other left intact. Under the stimulus of castration the pituitary gland of the castrated animal hypersecretes and the excessive gonadotropic hormones stimulate the ovaries of the intact animal to increased estrogen production, causing continuous estrus and adrenal hyperplasia in the intact animal. If estradiol is given to the castrated animal, the gonadotropic secretion of the pituitary gland is inhibited, so that excessive estrogen is not produced.[7]

In a report on another set of pygopagus twins,[8] when one became pregnant both developed increased pigmentation, and both lactated, the aunt more than the mother, indicating exchange of pituitary hormones.

The presence of a leiomyoma in Margaret and not in Mary does not necessarily prove or disprove that ovarian hormones are causal, for it is likely that the concentration of hormones in each is different. The interchange of ovarian secretions between the twins is not as simple as the exchange of dyes, for ovarian substances are apparently rapidly removed from the blood stream, especially by the liver. Furthermore it is likely that there are differences in sensitivity of end organs and in the presence or absence of a leiomyoma anlage.

The similarity of Margaret's and Mary's temperature charts, not only during the present hospital sojourn, but also during hospitalization at ages 3 and 21, allows the conclusion that substances affecting temperature control are disseminated by way of the blood stream, at least during localized infections such as cystitis.

The close parallelism of the blood pressure curves has two possible explanations, either as humoral transmission of pressor substances affecting both twins quantitatively, or as identical responses to environmental influences. There was no evidence to favor one over the other. The absence of crossed effect from the cold pressor test was expected with this test, as vasomotor reflexes rather than chemical changes are responsible for changes in blood pressure and the twins had no demonstrable intercommunication of autonomic nerves. In the mecholyl and sodium isoamylethylbarbiturate tests, lack of crossed effect is best explained by such rapid removal of the drugs from the blood that little or none reached the other twin. The greater effect of

5. Perlstein, M. A., and LeCount, E. R.: The History and Necropsy Report of the Bohemian Twins, Rosa-Josepha Blazek, Arch. Path. **3**: 171-192 (Feb.) 1927.

6. Hurxthal, L. M.: Personal communication to the authors.

7. Meyer, R. K., and Biddulph, C.: The Influence of Estradiol on the Secretion of Gonadotrophic Hormone in Adult Parabiotic Rats, Am. J. Physiol. **134**: 141-146 (Aug.) 1941. Pinto, R. M.: Interrelations of Adrenal and Sex Glands in Parabiotic Rats, ibid. **144**: 652-657 (Oct.) 1945.

tetraethyl ammonium chloride on Margaret, even when administered only to Mary, indicates increased vasomotor tone of the more hypertensive sister.

In physiologic experiments [8] when 1 of 2 parabiotic rats is rendered hypertensive, the co-twin may also have a rise in blood pressure, but fails to have an exactly identical increase and in some cases fails to have any rise. Presumably, there is a difference of concentration of "pressor" or "antipressor" substances between the 2, owing, possibly, to rapid removal of these substances from the circulation before they have a chance to pass from one to the other. Grollman and Rule [8] observed that hypertension results from removal of two or three kidneys from parabiotic rats and concluded that deficiency of an "antipressor" generated by the kidneys is the cause of hypertension in these cases.

Several hypotheses are possible to explain the hypertension in our twins. It could well be hereditary, since their mother has elevated blood pressure, or it may be secondary to chronic renal infection, on the basis of Margaret's renal and vesical calculi and past history of pyuria, with "pressor" substances carried to both twins by way of the circulation, or from deficient production of "antipressor" substance by Margaret's diseased kidneys. The more exaggerated response to tetraethyl ammonium chloride by Margaret, the hyperkinetic twin, proves her vasomotor tonus and lends support to Selye's [9] theory of psychic stimulation of the adrenals. Mary's blood pressure was of lesser degree because neither the psychic nor renal factors pertained in her case. It might be conjectured that Mary's milder hypertension was entirely due to a transport of "pressor" substances from her more hypertensive sister. While it is possible that Margaret had deficiency of "antipressor" substances from renal damage, there is no reason to suspect this in Mary, so that the presence of a "pressor" substance, which would be transmittable, is more likely than deficiency of "antipressor," which would not be transmissible. The demonstration of a small amount of renin in the blood of both twins supports the theory of a transport of a "pressor" substance from Margaret to Mary.

It is significant that the sister with the higher blood pressure was also the more hyperkinetic one and furnishes evidence for the presence of psychosomatic elements in hypertension.

SUMMARY AND CONCLUSIONS

Clinical observations on a hitherto unreported set of pygopagus twins furnish grounds that such anomalies originate from two separate ova rather than, as frequently supposed, from a maldeveloped single ovum. There are data to confirm the transportation of female sex hormones by the blood stream and to show humoral transmission of temperature-elevating substances in fevers associated with infections. Emotional states appear not to be mediated by way of the circulation. The parallelism of their blood pressure curves suggests a humoral control, but may have been from similar response to environmental factors. Their hypertension appeared to be due to a combination of heredity, chronic renal infection, chronic anxiety and nervous tension factors, with renal and tension factors predominating in Margaret and hereditary and humoral factors in Mary.

8. Grollman, A., and Rule, C.: Experimentally Induced Hypertension in Parabiotic Rats, Am. J. Physiol. **130**: 587-592 (March) 1940.

9. Selye, H. L.: General Adaptation Syndrome and the Diseases of Adaptation, J. Clin. Endocrinol. **6**: 117-230 (Feb.) 1946.

SYMPTOMS MASKED OR MODIFIED BY CHEMOTHERAPY

The Increasing Responsibility of the Roentgenologist

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and
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In a recent ward round, the Chief of the Surgical Service of the University of Virginia Hospital remarked, "Since the advent of chemotherapy, the sections of textbooks dealing with the diagnosis of infection must be rewritten." With the widespread use of chemotherapy in any illness remotely suggesting infection, few patients fail to receive one of the newer chemotherapeutic remedies. It is the almost universal experience of physicians in the larger reference institutions that an increasing number of patients are seen in whom the classical symptoms of disease are masked or modified by previous chemotherapy. The correct diagnosis of disease, or the proper evaluation of progression or regression of pathologic processes, even after the diagnosis has been established, has become much more difficult. The roentgenologist, therefore, since he interprets pathologic changes as depicted on his films, must assume more and more responsibility with respect to the proper treatment of the patient, disregarding in large part, classical symptomatology.

Several reports dealing with single cases of infection or of one or more diseases, with masked symptoms have appeared in the recent literature. Labby [1] reported a case of recurrent pneumococcic meningitis following treatment with sulfonamide compounds. Weinstein and Atherton [2] reported sinus phlebitis occurring during treatment of acute suppurative otitis media with no clinical signs of mastoiditis. Riley [3] as quoted by Rothman, reported a case of acute appendicitis treated by full sulfadiazine dose for seventy-six hours at sea with complete masking of symptoms, with acute appendicitis at operation. Rothman [4] summarized the literature through 1945, stressing the recurrence of symptoms following cessation of chemotherapy. Christie and Wyatt [5] in 1946 stressed the changes in roentgenologic diagnostic criteria, presenting several cases of osteomyelitis and 1 of perinephritic abscess.

During the past few years the members of the Department of Roentgenology of the University of Virginia Hospital have been impressed by the increasing number of patients with diagnostic difficulties following chemotherapy, in whom the symptoms did not fit in with the roentgen findings. This has been particularly true in surgical complications resulting from pneumonia. Abscess of the lung and infected bronchiectasis offer many such difficulties, and it is our impression that there is a definite increase in these complications following chemotherapy. Possibly this may be explained

From the Department of Roentgenology, University of Virginia Hospital.

Read before the Section on Radiology at the Ninety-Sixth Annual Session of the American Medical Association, Atlantic City, N. J., June 11, 1947.

1. Labby, D. H.: Recurrent Pneumococcic Meningitis Following Sulfonamide Therapy, J. A. M. A. **127**: 981 (April 14) 1945.

2. Weinstein, S., and Atherton, H. B.: The Treatment of Acute Suppurative Otitis Media with Penicillin, J. A. M. A. **129**: 503 (Oct. 13) 1945.

3. Riley, C. M.: Atlantic Fleet M. News Letter, Dec. 10, 1944, no. 12-44; cited by Rothman.[4]

4. Rothman, P. E.: Recurrence of Infection Following Therapy with Sulfonamide Compounds and Penicillin, Am. J. Dis. Child. **72**: 415 (Oct.) 1946.

5. Christie, A. D., and Wyatt, G. M.: Changes in Roentgenological Diagnostic Criteria Resulting from Chemotherapy, J. A. M. A. **132**: 895 (Dec. 14) 1946.

by the relative lack of liquefaction of bronchial secretion as demonstrated in experimental animals.[6]

Without resort to statistical data, illustrative cases of varied conditions are presented, with symptoms and signs at variance with the roentgenologic and operative findings.

REPORT OF CASES

Case 1.—For ten months, M. F. a woman aged 70 years, had intermittent attacks of fever and abdominal cramps, accompanied by a watery diarrhea with mucus and traces of fresh blood. A barium enema revealed an obstruction in the sigmoid colon, with diverticula proximal to the obstruction. When she was treated for diverticulitis by colonic rest, the obstruction was quickly relieved. A five day course of sulfadiazine resulted in complete disappearance of fever, diarrhea and discomfort. Two weeks after discontinuance of the drug, symptoms returned in more severe form. Again, a barium enema demonstrated pronounced diverticulitis, and again sulfadiazine produced relief.

Fig. 1 (case 1).—Carcinoma of the sigmoid, discovery of which was delayed by response to sulfadiazine therapy of an earlier demonstrated sigmoid diverticulitis.

Subsequent episodes in the next two months did not respond so well and a pelvic mass was discovered. Barium enema then (fig. 1) showed a tumor of the sigmoid colon as well as diverticulitis. At laparotomy, a large cancer of the sigmoid colon was found, invading the bladder.

Comment.—In this case, the response of diverticulitis of the sigmoid colon to sulfadiazine delayed discovery of a carcinoma of the sigmoid colon.

Case 2.—D. R. V., one of a pair of premature twins, had omphalitis and an infection of the blood stream with Staphylococcus aureus in its second week of life. With penicillin, the omphalitis promptly cleared up and in ten days blood cultures were negative, but penicillin was continued for another week. Ten days later, diarrhea developed. It was treated by Murphy drip and sulfadiazine. While sulfadiazine was being given, infection developed at the site of insertion of a bone marrow drip needle. Administration of penicillin was again started. The infection of the bone spread, a pathologic fracture occurred, but healing was complete in six weeks (fig. 2 *A*). There was no sequestration and the maximum temperature was 100 F.; the white blood cell count was 21,000 when the diarrhea started and did not exceed 11,000 during the course of the osteomyelitis. The infant was discharged in excellent condition.

Fig. 2.—*A* (case 2), osteomyelitis of the tibia, involving entire shaft and complicated by a pathologic fracture. There was complete healing in six weeks under penicillin therapy. *B* (case 3), osteomyelitis of the radius treated with penicillin, six months after onset of disease. The failure of healing and sequestration were unsuspected clinically because of the absence of symptoms. True status determined by roentgenographic examination only.

Comment.—Osteomyelitis, complicating treatment of an ill, weak premature infant, healed in six weeks under penicillin therapy. Though the infection involved the entire shaft of a tibia and was itself complicated by a pathologic fracture, local and constitutional symptoms were minimal, and the bone did not sequestrate.

Case 3.—W. F. W., a white boy aged 18, was admitted after he had received penicillin for three weeks for osteomyelitis of the radius. Excruciating pain had been relieved, but the

Fig. 3 (case 4).—Osteomyelitis of the tibia, symptoms controlled by penicillin but infection still spreading.

forearm was still tender, swollen and hot. The temperature was 101 F., and the white blood cell count 12,500. On the day of admission, the central abscess was unroofed, releasing a large amount of thick, white pus. Penicillin was continued

6. Jackson, C. L., Jr.: Personal communication to the authors.

and sulfadiazine started. Local and constitutional symptoms promptly disappeared. Five weeks later (fig. 2 *B*), healing had begun but sequestrums had developed. It was nearly six months before he could be given a hospital bed for sequestrectomy. During this time, there was persistent drainage, but no discomfort or fever.

Comment.—During treatment for osteomyelitis by penicillin, it is more important than ever to follow the course of the infection by roentgen rays. The clinical picture is frequently completely misleading.

CASE 4.—After ten days of pain in the upper part of the tibia accompanied by limping, fever, localized hyperemia and swelling, roentgenograms of R. R., a white boy aged 8, revealed a slight amount of destruction of bone in the anterior tibial cortex just distal to the upper epiphysial line. Penicillin was administered for two weeks. In one week, local and constitutional symptoms had disappeared. Roentgenograms showed no change. Penicillin was discontinued. Two weeks later, local symptoms reappeared. Roentgenograms (fig. 3 *A*) now showed definite progress of the osteomyelitis. Penicillin again produced rapid clinical improvement, but check roentgenograms (fig. 3 *B*) seven weeks later showed the infection to have spread still further.

Comment.—The infection might have been completely arrested by more prolonged treatment. When it flared up, penicillin could control the clinical symptoms but not the spread of the infection.

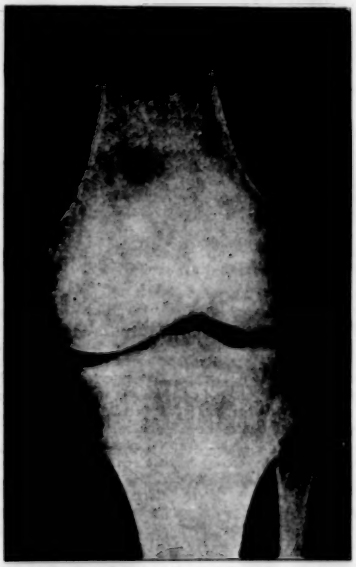

Fig. 4 (case 5).—Fibrosarcoma of the femur, the biopsy diagnosis of which was delayed because the clinical response to penicillin was that of Brodie's abscess.

CASE 5.—G. S., a woman aged 31 years, had suffered intermittent pain in the left knee for five years. On examination, the knee was found to be partially ankylosed, tender, moderately swollen, slightly hot and slightly reddened. The temperature was 99 F., the white blood cell count 8,400. Roentgen examination (fig. 4) showed central bone destruction with perforation of the cortex in the condylar region. Biopsy was advised to differentiate between Brodie's abscess and an atypical tumor of the bone.

Penicillin was given preoperatively. In forty-eight hours, all pain had disappeared and articular motion was partially restored. The patient then refused biopsy. Penicillin was given for two

Fig. 5 (case 6).—Large left perinephritis abscess, demonstrated by lateral displacement of the left kidney on intravenous pyelography. Penicillin had obscured clinical evidence of the infection.

weeks, during which time roentgenograms showed increased destruction of bone, and the roentgenologists again urged biopsy. The surgeons were willing but not enthusiastic, feeling that the clinical course indicated Brodie's abscess, and the patient flatly refused. When penicillin was stopped, pain recurred. Roentgenograms showed progressive destruction of bone. Exploration revealed a tumor. The pathologic report was highly malignant fibrosarcoma.

Comment.—Penicillin caused a fibrosarcoma to follow the clinical course of Brodie's abscess. Sufficient importance was not attached to the fact that destruction of bone progressed steadily, in spite of the clinical improvement.[7]

CASE 6.—S. W. B., a boy aged 18 years, was admitted with a history of pain in the left flank of fifteen days' duration, for which he had received penicillin with partial relief of pain.

On admission, the left flank was moderately full and tender. The urine was normal, and the temperature normal. Penicillin was continued for another week with slow disappearance of the pain and fulness in the left flank. Pain suddenly developed in the lower left part of the chest; the white blood cell count jumped from 10,000 to 25,000, and roentgenograms of the chest revealed a left pleural effusion. Large amounts of bloody fluid containing staphylococci were removed in the next two days. Pyelograms were then obtained by the intravenous method, demonstrating a lateral displacement of the left kidney (fig. 5). The next day, the region of the left kidney was

7. While demonstrating a scientific exhibit on the subject of this paper at the Atlantic City meeting of the American Medical Association one of us (V. W. A.) was told by eleven different physicians that they had had single cases of bone tumors in which the pain has been greatly relieved during treatment with penicillin, an indication that this case of ours may not be uncommon.

explored, releasing a large amount of thick pus from the perinephritic space. The chest fluid promptly became sterile. Pleural thickening necessitated decortication three weeks later, after which convalescence was uneventful.

Comment.—Penicillin obscured the progress of a perinephritic abscess, delaying drainage until empyema developed.

CASE 7.—P. P., a girl aged 19 years, had a tonsillectomy under ether anesthesia. Two weeks later, fever, cough and foul sputum developed. An abscess in the upper lobe of the right lung was demonstrated by roentgen ray. During a course of penicillin, the abscess disappeared, leaving only fibrous scarring. Two weeks after the penicillin was discontinued, all symptoms returned. Roentgenograms now showed pneumonitis at the site of the abscess. For the next six months, symptoms were intermittent and were easily controlled promptly by penicillin. Roentgenograms (fig. 6) showed dense infiltration. (Note the cavity on the Bucky plate.) At operation, a dense, hard area, suggestive of cancer, was found in the anterior half of the upper lobe of the right lung. The pathologist reported subacute bronchiectasis and an abscess 1.5 cm. in diameter.

Comment.—This is one of a number of cases which we have seen in which penicillin has discouraged but not cured a lung abscess, leading to the development of a stony hard area of subacute bronchiectasis.

CASE 8.—W. E. McC., a man aged 34 years, had lobar pneumonia, from which he recovered promptly, being treated with sulfadiazine. Three weeks later, fever and productive cough returned. On roentgen examination, "a spot on the lung" was discovered. After four weeks of treatment wtih penicillin and sulfonamide drugs, he was well for four months. Fever and cough recurred; the sputum was foul and copious; there was a rapid loss of weight and strength, and a roentgenogram showed "the spot on the lung" to be larger.

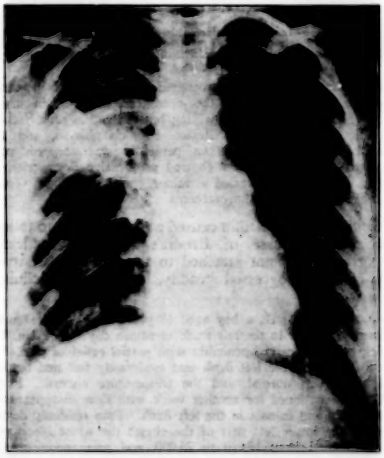

Fig. 6 (case 7).—End result of a postanesthesia abscess of the upper lobe of the right lung treated by penicillin. Lobectomy was necessary.

Admission to a state tuberculosis sanatorium was sought and obtained. During a two months' stay there, repeated sputum examinations were negative for tubercle bacilli, the patient continued to lose strength, and it was noted that clubbed fingers developed. He was then transferred to the University Hospital.

Roentgenograms of the chest, on admission (fig. 7), showed a dense opacity in the upper lobe of the right lung. On bronchoscopy, inflammation of the bronchus of this upper lobe was observed and a small amount of purulent sputum was seen coming from it. The abscess was drained in two stages. At the second operation, a large amount of thick yellow pus and some necrotic tissue were evacuated. Penicillin was given

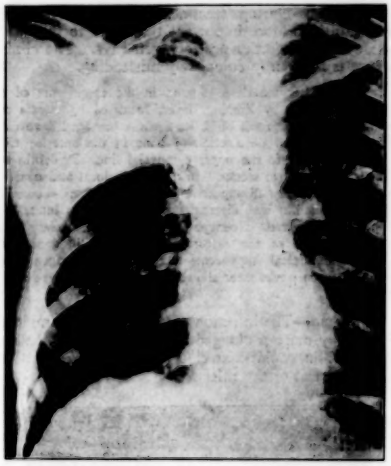

Fig. 7 (case 8).—End result of a postpneumonia abscess of the upper lobe of the right lung treated by sulfonamide drugs and penicillin. Two stage drainage was necessary.

throughout the hospital stay. The white blood cell count never exceeded 14,000, and there was only a low grade fever. Recovery was uneventful.

Comment.—Sulfonamide drugs and penicillin obscured the clinical picture in a postpneumonia abscess of the lung to such an extent that the patient was placed in a tuberculosis sanatorium. Correct diagnosis and proper treatment were deferred for months.

CASE 9.—I. J., a man aged 57 years, had pneumonia of the lower lobe of the right lung, complicated by a pleural effusion, which was treated with penicillin and sulfadiazine. All cultures from the chest fluid were negative. The fluid gradually decreased, the pneumonia slowly resolved, and after one week of normal temperature he was discharged. He returned ten days later, stating that a dull pain had developed in the base of the right lung as soon as he got home (within twenty-four hours after discontinuance of penicillin and sulfadiazine); that he had felt weak and feverish, and had had one night sweat. Roentgenograms showed more fluid in the base of the right lung. Thick, greenish pus was obtained by chest tap from which anaerobic hemolytic and nonhemolytic streptococci were cultured. Penicillin and sulfadiazine were again administered. The response was poor, and a week later the empyema cavity was decorticated. Recovery was rapid.

Comment.—Penicillin and sulfadiazine delayed but did not prevent development of empyema complicating lobar pneumonia. More prolonged treatment might have been beneficial.

CASE 10.—Treated for pneumonia with a sulfonamide drug, O. F. H., a man aged 53 years, responded favorably, but after he had been afebrile for one week his sputum became more copious and foul. He lost strength and had a number of chills and more fever. After three weeks of poor response to a sulfon-

amide drug, he was referred to the University Hospital. Roentgenograms showed pocketed fluid well forward in the left side of the chest and close to the mediastinum. At operation, thick pus drained from the cavity and a bronchial fistula was found. It was not clear whether this was an empyema or abscess cavity. Recovery was good.

Comment.—A sulfonamide drug attenuated an empyema (or lung abscess) enough to delay surgical treatment several weeks.

CASE 11.—S. S., a woman aged 40 years, was admitted in an attack of acute cholecystitis. Placed on a regimen of nothing by mouth, intravenous fluids and penicillin, she was completely asymptomatic within three days. She was gradually built up to a regular diet and prepared for surgical treatment. A cholecystogram revealed a nonfunctioning gallbladder. Cholecystectomy was done on the seventeenth hospital day. The gallbladder wall was thick and indurated, the gallbladder filled with stones and purulent exudate.

Comment.—The clinical picture of acute cholecystitis was abruptly obscured by penicillin. For two weeks, a severely diseased gallbladder was kept completely silent.

CASE 12.—Five days before admission, a woman aged 28 years experienced severe pain in the left ear, followed in a few hours by purulent drainage. On admission, the left ear was draining copiously, there was tenderness behind it, and the temperature was 103 F. Roentgenograms showed a hazy left mastoid without cell destruction. Penicillin was started at once. Forty-eight hours later, there was no fever, no tenderness, and discharge had almost ceased, but the canal was sagging. A week later, the ear again became painful, and after myringotomy discharge was profuse. Roentgenograms showed the left mastoid to be considerably hazier, but still no cell destruction was demonstrated. At mastoidectomy, all cells were found to be filled with gelatinous, agglutinated pus.

Comment.—This is one of a number of cases of mastoiditis in which penicillin restrained but did not

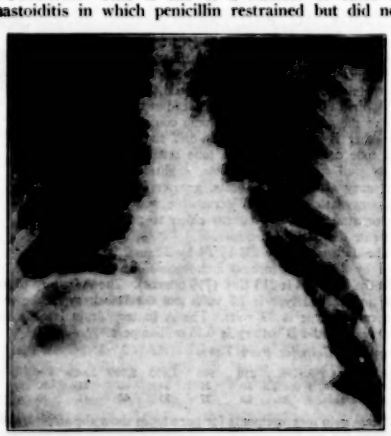

Fig. 8 (case 14).—Large right subphrenic abscess, the symptoms of which were obscured by penicillin therapy.

cure the infection. Frequently, the cell walls remain intact; they usually are found to contain gelatinous, agglutinated pus.

CASE 13.—J. C. McC., a boy aged 8 years, had acute sinusitis and a painful ear. During treatment with penicillin the pain in the ear disappeared so quickly that it was forgotten, treatment being directed to relief of the severe sinus infection. Two weeks later, while the patient was still on penicillin, a swelling suddenly appeared above the left zygoma. Though the left drum was bulging and roentgenograms showed a hazy mastoid without destruction of bone, the temperature was 99.2 F. At operation, the mastoid structures were soft and filled with granulations.

Fig. 9 (case 14).—Same patient as in figure 8, after drainage of the right subphrenic abscess. A large subhepatic abscess of the left upper quadrant was demonstrated roentgenologically by the displacement of the stomach, but was not recognizable by physical signs or clinical symptoms during penicillin therapy.

Comment.—Treatment of acute sinusitis with penicillin completely masked acute mastoiditis.

CASE 14.—C. L. W., a man aged 30 years, had a sudden attack of violent epigastric pain. Hospitalized elsewhere with a tentative diagnosis of spider bite, he was, in addition to other measures, given penicillin. He slowly improved, and two weeks later was discharged, having had no temperature for a week. The night after discharge and discontinuance of the penicillin, he suffered a second attack of violent epigastric pain. Roentgenograms made elsewhere (fig. 8) showed a large right subphrenic air space.

The patient was admitted to the University Hospital; penicillin was again started and continued throughout the hospital stay. The right subphrenic space was drained, releasing a large amount of gas and foul, thin pus. Drains were brought out through the incision and a five day course of streptomycin given. Nevertheless, the temperature curve continued septic. Roentgenograms two weeks later showed air still present under the right diaphragm, both diaphragms fixed, and a little fluid in the base of the left lung. The surgeon elected first to reexplore the right subdiaphragmatic space. No pus pockets were found. Then barium studies of the stomach were done (fig. 9), showing the stomach shifted to the left and downward. Through an upper midline incision, a large subhepatic abscess in the left upper quadrant was drained. Postoperative studies showed the stomach back in normal position.

Comment.—Here penicillin obscured the clinical diagnosis of a right subdiaphragmatic and left subhepatic abscess. The roentgen observations were diagnostic.

SUMMARY

Symptoms were markedly altered by chemotherapy in the following conditions: (1) diverticulitis with cancer, (2) fibrosarcoma, (3) perinephritic abscess,

(4) lung abscess, (5) acute cholecystitis, (6) mastoiditis, (7) subphrenic and subhepatic abscess, (8) empyema and (9) osteomyelitis.

The roentgenologist must accept an increasingly large share of the responsibility for correct evaluation of progression or regression of pathologic processes due to infection when treated by chemotherapy.

ABSTRACT OF DISCUSSION

DR. GEORGE M. WYATT, Washington, D. C.: I have been interested in osteomyelitis as altered by penicillin and the sulfonamide drugs. In regard to the case that Dr. Archer showed of an acute condition which was thought to be osteomyelitis, I should like to add a word or warning on the other side, as probably all of you have seen cases in which the pathologists found it difficult to differentiate between malignant and benign tumors and callus. This is particularly true in children when attempts are made to get a quick diagnosis. From the few cases with which I have personally come in contact, in which extremities have been removed with a mistaken diagnosis of cancer, I wonder whether perhaps more extremities have not been removed with the mistaken diagnosis than malignant tumors cured by amputation. The roentgen diagnosis, as Dr. Archer has stressed, is based on pathologic changes. If we continue to study pathologic changes as we see them on the roentgenogram and keep in mind the effect of chemotherapy on pathologic changes, we can help the clinician.

Council on Physical Medicine

The Council on Physical Medicine on the advice of the Consultants on Audiometers and Hearing Aids has adopted the following article. The Consultants on Audiometers and Hearing Aids are: Drs. Gordon Berry, Hallowell Davis, Kenneth M. Day, Edmund Prince Fowler, Isaac H. Jones, Dean Lierle, Moses H. Lurie, Douglas Macfarlan, C. Stewart Nash and Paul E. Sabine. The Council appreciates the cooperation of the Consultants on Audiometers and Hearing Aids.

HOWARD A. CARTER, *Secretary.*

REBATES

The House of Delegates of the American Medical Association has taken a definite stand against the acceptance by physicians of rebates or "kick-backs" in any form. A physician dispenses medical or surgical service and for this he is entitled to a fair recompense. When he, himself, furnishes drugs, spectacles or any physical appliance and when he is able to service such physical appliances, he is entitled to a fair profit on these articles of merchandise in addition to and above his own professional fee and such a profit on such articles of merchandise does not in any way constitute a rebate or "kick-back." However, when he prescribes such an article for his patient and the patient purchases the article from an independent dealer the doctor is not morally or ethically entitled to any financial return from the dealer.

It has come to the attention of the Consultants on Audiometers and Hearing Aids of the Council on Physical Medicine of the American Medical Association that physicians in various parts of the country are being offered, and that some have accepted, money from dealers for recommending particular makes of hearing aids. Such a transaction between the doctor and the dispenser of hearing aids constitutes a rebate and is in direct contravention of the stand of the American Medical Association in this matter. It is degrading to the profession and commercializes the doctor who accepts such a "kick-back." It is not believed by the Council on Physical Medicine that such a policy is encouraged by the manufacturers of hearing aids, but the manufacturer cannot always control the business ethics of his individual dealers.

A modified form of "kick-back" is a recent suggestion that a hearing aid dealer would sell only to patients whose ears had been examined by an otologist. The doctor's fee according to this arrangement would be paid by the hearing aid dealer. Presumably the cost would be passed on ultimately to the patient in the form of a higher price for his instrument. Such an arrangement is disapproved by the Consultants, since it involves a payment from dealer to physician that might be interpreted or used as a "kick-back." To be beyond criticism in such a situation, the payment to the doctor should be made by the patient himself, not by the dealer.

The Council on Physical Medicine believes that these practices constitute the acceptance of a rebate on the part of the profession and that every possible step should be taken to abate it.

The Council on Physical Medicine has authorized publication of the following reports. HOWARD A. CARTER, *Secretary.*

OTARION HEARING AID MODEL E-18 ACCEPTABLE

Manufacturer: Otarion Hearing Aids, 159 North Dearborn Street, Chicago 1.

This instrument is a three tube air conduction hearing aid, with the batteries contained in the amplifier case. The case is constructed of die-cast magnesium alloy, coated with vinyl resin finish, ivory in color. A side-hinged full length back cover gives access to the battery compartments and the three tubes, which are readily accessible. The magnetic type receiver is connected to the amplifier case by means of a light plastic-covered cord which has dual pin plugs at each end.

Otarion Hearing Aid Model E-18

Two wheel-type controls are placed at the top of the case. One is a volume control; the other is a combination "on-off" switch and tone control with three tone settings: 1 dot, full tone range; 2 dots, slight low frequency attenuation, 3 dots, greater low frequency attenuation. A detachable wearing or attachment clip fastens either to the front or the back of the case.

The dimensions are 133 by 64 by 22 mm. (5¼ by 2½ by ⅞ inches) and the weight with the batteries is 213 Gm. (7½ ounces). The A battery of the zinc and carbon type is 1.5 volts and the B battery of the zinc and carbon type is 30 volts. The A battery drain is 55 milliamperes and the B battery is 0.36 milliampere.

Acoustical Gain for Pure Tones

Tone Control Position...	250	500	1,000	2,000	3,000	4,000 cycles
Maximum gain, 1 dot...	30	31	34	40	41	30 db.
Maximum gain, 2 dots..	22	27	33	40	41	30 db.

These gain measurements for pure tones show the amplification efficiency of the hearing aid in decibels at the indicated frequency levels.

Acoustical Gain for Speech.—The maximum gain, with the tone control in the 1 dot position, was 34 decibels. This value for speech was obtained on 2 different hard of hearing persons, each of whom is an experienced user of hearing aids and has approximately 60 decibels unaided loss for speech with a speech audiometer. These 2 persons perceived speech with 34 decibels less intensity through a high quality sound amplification system (speech audiometer) in a sound-proof room with the hearing aid than without it.

The Council believes that this instrument, the Otarion Model E-1S, will be satisfactory only for persons requiring moderate amplification and should not be recommended for persons with severe hearing impairments.

The Council on Physical Medicine voted to include the Otarion Hearing Aid Model E-1S in its list of accepted devices.

SYLVANIA 250 WATT R40 INFRA-RED LAMPS ACCEPTABLE

Manufacturer: Sylvania Electric Products, Inc., 60 Boston Street, Salem, Mass.

Two specimens of a 250 watt R40 infra-red lamp were submitted. These require a 120 volt alternating current and draw 2.08 amperes. They weigh 225 Gm. (½ pound) and measure about 13 cm. (5 inches) in diameter. They differ in length and in the material of the bulb; the ruby type measures about 18 cm. (7¼ inches) while the frosted type measures about 16.5 cm. (6½ inches). Each lamp has an aluminum reflector and a tungsten filament operating at a color temperature of 2,400 degrees Kelvin.

On the basis of the available evidence the Council concluded that these lamps are satisfactory sources of thermal radiation, useful especially for the close-up irradiation of small areas of the body, such as the shoulder or the forearm, where they are more convenient and less likely to cause burns than are more powerful lamps with larger reflectors.

The Council voted to include the Sylvania 250 watt R40 infra-red lamps in its list of accepted devices.

Council on Pharmacy and Chemistry

REPORT TO THE COUNCIL

The Council has authorized publication of the following reports.

AUSTIN SMITH, M.D., *Secretary.*

EXCESSIVE CONCENTRATIONS OF SOLUTIONS SODIUM ASCORBATE NOT ACCEPTABLE

In considering the acceptance of solutions of sodium ascorbate it has been found that some brands are marketed in concentrations of vitamin C far in excess of that which may be necessary for the treatment of conditions resulting from deficiencies of this vitamin. Some of these products have been accompanied by representations that the product is intended for treatment of allergies. The evidence in support of this therapeutic procedure does not appear to be convincing, and there seems to be no justification for parenteral administration of this vitamin in excess of concentrations adequate to temporarily overcome severe deficiencies of the vitamin.

The Council has not heretofore and does not now contemplate recognition of claims for the use of injections of sodium ascorbate in the treatment of allergies. The Council therefore voted to limit its acceptance of injectable solutions of sodium ascorbate to concentrations representing 100 mg. of ascorbic acid per cubic centimeter or less.

METHADON CHANGED TO METHADONE

The Council recently published a report announcing recognition of the generic name "methadon" for 6-dimethylamino-4, 4-diphenyl-3-heptanone (J. A. M. A., Aug. 23, 1947, p. 1483). Subsequently, it was pointed out that inasmuch as the substance is a ketone and chemical nomenclature rules call for the names of ketones to end in "one," an appropriate change should be made in the adopted term. A poll of the various interested firms revealed that all recognized the logicality of this change, although not all were certain that such a change is necessary. However, in the interest of accurate nomenclature and on motion of the Council's Committee on Nomenclature, it was voted that recognition of the term "methadon" be revoked and that instead the term "methadone" (with a final "e") be recognized as the generic name for 6-dimethylamino-4, 4-diphenyl-3-heptanone. The name "methadon" will be retained as a synonym in N. N. R. until the revised spelling has become well established.

NEW AND NONOFFICIAL REMEDIES

The following additional articles have been accepted as conforming to the rules of the Council on Pharmacy and Chemistry of the American Medical Association for admission to New and Nonofficial Remedies. A copy of the rules on which the Council bases its action will be sent on application.

AUSTIN SMITH, M.D., *Secretary.*

THIAMINE HYDROCHLORIDE (See New and Nonofficial Remedies 1947, p. 506).

The following dosage forms have been accepted:

R. E. DWIGHT & COMPANY, DES MOINES, IOWA

Tablets Thiamine Hydrochloride: 5 mg. and 10 mg.

LINCOLN LABORATORIES, INC., DECATUR, ILL.

Solution Thiamine Hydrochloride: 10 mg. per cc., 10 cc. vials. Preserved with chlorobutanol 0.5 per cent.

DIETHYLSTILBESTROL (See New and Nonofficial Remedies, 1947, p. 247).

The following additional dosage form has been accepted:

ABBOTT LABORATORIES, NORTH CHICAGO, ILL.

Solution Diethylstilbestrol in Oil: 5 mg. per cc., in peanut oil, 1 cc. ampul.

CONTRACEPTIVE CAPSULES AND SUPPOSITORIES (See New and Nonofficial Remedies 1947, p. 270).

The following dosage form has been accepted:

SPECIAL FORMULA CORPORATION, NEW YORK

Lygenes Vaginal Suppositories: 2.25 Gm. A vaginal suppository with an oil of theobroma base prepared from the formula:

	Per Cent
Boric acid	0.10
Zinc sulfocarbolate	0.50
Hydroxyquinoline benzoate	0.30
p-Chloro-symm. m-cimetayl hydroxybenzene	0.05
p t.rt. amylhydroxy benzene	0.05
Beeswax, white	5.00
Corn starch	9.00
Perfume	0.20
Cocoa butter	84.80

Actions and Uses.—See article on Contraceptive Capsules and Suppositories.

Dosage.—One suppository.

DIENESTROL (See THE JOURNAL, Nov. 22, 1947, p. 773).

The following dosage form has been accepted:

RARE CHEMICALS, INC., HARRISON, N. J.

Tablets Dienestrol: 0.1 mg. and 0.5 mg.

DIETHYLSTILBESTROL-U.S.P. (See New and Nonofficial Remedies 1947, p. 347).

The following dosage form has been accepted:

BIO-INTRASOL LABORATORIES, INC., BROOKLYN

Solution Diethylstilbestrol in Oil: 1.0 mg. per cc. in sesame oil, 1 cc. ampuls.

MENADIONE-U.S.P. (See New and Nonofficial Remedies 1947, p. 533).

The following dosage form has been accepted:

R. E. DWIGHT & COMPANY, DES MOINES, IOWA

Capsules Menadione: 2 mg.

SULFADIAZINE-U.S.P. (See New and Nonofficial Remedies 1947, p. 120).

The following dosage form has been accepted:

COLE CHEMICAL CO., ST. LOUIS

Tablets Sulfadiazine: 0.5 Gm.

CORRECTION

Toxic Dose of BAL in Oil.—In the monograph on "2,3-Dimercaptopropanol in Oil.—BAL in Oil" (J. A. M. A. 137:368 [May 22] 1948) the statement appearing in the first sentence of the fourth paragraph under the heading "Actions and Uses," relative to the toxic dose of this drug, should read ". . . but doses of 300 mg. (5 mg. per kilogram of body weight) may produce . . ."

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

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SATURDAY, OCTOBER 30, 1948

ST. LOUIS INTERIM SESSION

This issue of The Journal calls special attention to some of the features of the Interim Session of the Association to be held in St. Louis Nov. 30-Dec. 3, 1948. The features of this session include a graduate educational program, technical and scientific exhibits, general meetings of unusual quality and one evening devoted wholly to entertainment. The House of Delegates will hold its sessions and, as a new departure, the annual reports of officers and Board of Trustees will be considered in the Interim Session rather than in the Annual Session.

Attention is called particularly to the nature of the graduate educational program which has already been described in The Journal and which is unique. There will be discussions each morning and each afternoon, after which the audience will go in groups of about a hundred to separate halls, where consideration will be given to certain aspects of the subject discussed with presentation of cases. At the same time the scientific exhibits will make available the laboratory material used in such studies as well as other exhibits. The general meetings will include the award of the General Practitioner Medal and addresses by distinguished speakers. The evening of entertainment has been supplied by one of the advertisers in The Journal and includes the stars of a series of radio programs who are famous in the United States. Attendance at the entertainment will be limited to physicians and their families registered at the session and is not open to the general public.

The Technical Exhibit occupies all the space available in the auditorium and represents demonstrations of the new drugs, the new devices, the new books and other developments in medicine since the Annual Session last June.

The timing of all of these programs has been so arranged as to give ample opportunity for those registered in the session to participate in each of the sessions and also to visit both the scientific and the technical exhibits.

Already the registrations in hotels in St. Louis indicate a large attendance, but there will be ample space for others who send immediately for their hotel reservations.

THE ADVERTISING OF CIGARETTES

For some years The Journal of the American Medical Association, the state medical journals and most other medical publications have carried the advertisements of the various companies that manufacture cigarettes. Actual surveys indicate that the majority of physicians themselves smoke cigarettes. Extensive scientific studies have proved that smoking in moderation by those for whom tobacco is not specifically contraindicated does not appreciably shorten life. Postmortem examinations do not reveal lesions in any number of cases that could be definitely traced to the smoking of cigarettes. From a psychologic point of view, in all probability more can be said in behalf of smoking as a form of escape from tension than against it. Several scientific works have been published that have assembled the evidence for and against smoking, and there does not seem to be any preponderance of evidence that would indicate the abolition of the use of tobacco as a substance contrary to the public health. Physicians are no doubt familiar with the articles that have been published on the effects of tobacco on the circulation, the blood, the gastric acidity and other physiologic mechanisms within the human body. This editorial will not attempt to summarize that evidence or to derive any positive conclusions from it. It is concerned, rather, with the manner in which leading manufacturers have begun to lean so heavily on reference to the medical profession in promoting their products.

The advertising accepted by The Journal of the American Medical Association has always been screened through various committees, and the evidence in behalf of the statements made has seemed to be sufficient to warrant the statements that appear in the advertisements. Gradually, however, claims point more and more toward the single factor of the extent to which certain cigarettes irritate the throat. One product is said to be less irritating than others, and the suggestion is made that persons who suffer irritation from other cigarettes try the one that is said to be less irritating. Another is said to be always milder; a third is said to be absolutely free from throat irritation as based on tests conducted under the supervision of physicians.

From time to time the manufacturers have sought for some positive chemical or physical factor related to the extent of irritation of the mucous membranes of the throat, and evidence and newer knowledge concerning growing, curing and blending have been accumulated in behalf of their contention.

Readers must remember that the cigarette business is a tremendous business and one that has increased continuously in volume for many years. The consumption of cigarettes has increased from approximately 10

billion cigarettes annually around 1910 to approximately 350 billion annually since 1946. The rise in consumption of cigarettes has paralleled the development of new technics in advertising, utilizing the press, periodicals, the radio, motion pictures, television, sky writers, billboards, direct by mail, sampling, exhibits and every other technic. No doubt the manufacturers are aware of the trend in the promotion of alcoholic liquors and their abuse which finally led to the enactment of prohibition legislation. This may well be the path now being followed by the cigarette industry and one which will eventually lead to restrictive legislation unless voluntary restrictive policing is undertaken by the industry.

The publications of the American Medical Association have received a few protests from physicians relative to the advertising of cigarettes: The total number of letters would not exceed a dozen annually. Some protests have been stimulated by the competition in the cigarette industry since the users of glycerin are at war with the users of diethyleneglycol; since the purchasers of tobacco with less nicotine compete with those using tobacco with more nicotine, and since the manufacturers of devices that eliminate tar oppose the smoking of cigarettes without elimination of tar. Probably there is no other merchandise marketed in the United States in which the competition is fiercer or greater.

Now that the advertising has begun to concentrate on the factor of throat irritation, more attention will have to be given to the methods by which irritation of the throat can be measured. Pathologically, one considers the clinical signs and symptoms such as redness, congestion, swelling, exudation, pain, sensitivity and similar subjective symptoms and objective signs. Obviously, more refined technics for study are in order.

Studies have been made of the throat utilizing color photography; yet none of the technics by which throat irritation is measured is standardized. Furthermore, we know that the throat is easily irritated by various bacteria and viruses, as well as by chemicals and physical agents. It would be difficult indeed to differentiate between the irritation caused by the smoking of cigarettes and that caused by various bacteria, chemicals or heat. Manufacturers and the advertising agencies that develop this advertising are approaching a point in which the advertising is no longer significant. And yet one can remember when it used to be worse than it is now.

The Federal Trade Commission has been striving to hold this advertising within reasonable limits. Hearings have been held for a number of years and as yet a decision has not been forthcoming from the Federal Trade Commission as to claims that are justified by the evidence and those that are not. Further truly scientific studies and respect for intelligent advertising may obviate the need for further extensive and time-consuming trials.

CONGENITAL DEFECTS

Since Gregg and his associates [1] presented original evidence that maternal rubella infection in early pregnancy appeared responsible for the frequent development of congenital anomalies in infants subsequently delivered, evidence for the truth of this influencing factor has grown rapidly. Anomalies most commonly noted have been ocular defects, deafness, heart lesions, microcephalus, mental retardation and dental defects. Estimates of percentage involvement of the fetus from maternal rubella during the first three months of pregnancy range from 90 per cent (Australia) to 27 per cent (United States), with a graded decreasing expected anomaly rate from rubella infection in later pregnancy. Reports have been made of anomalous development following maternal infection in the eighth and ninth month of pregnancy. A woman contracting rubella during pregnancy has now approximately a ten to one chance of subsequently being delivered of a congenitally defective child.[2]

Fetal injury is believed to occur as a result of passage of rubella virus through the placental barrier, thereafter exerting a direct effect on early somatic fetal development. Paradoxically, rubella produces the same result when it occurs and subsides even before conception. Retention of the virus in maternal tissues and its later passage through the placenta to the fetus may occur. Other diseases occurring in early pregnancy and in the immediate preconception period, particularly infectious mononucleosis, are stated to result in congenital defects. Both restricted maternal diet and fetal irradiation are known to be capable of causing anomalous development in offspring of laboratory animals.

Recent experiments reported by Gillman, Gilbert and Spence [3] should shed new light on the many unknown physiologic factors which bear on the problem of congenital anomalies. Believing that later effects of chronic malnutrition were causally related to a metabolic disorder induced by entry of abnormal particles into and by qualitative changes in plasma proteins, these investigators treated female rats with trypan blue because of its plasma albumin-binding properties. A random group of 100 breeding female rats and 25 male rats on normal stock diet were given repeated injections of 1 cc. of trypan blue at fourteen day intervals. Of the 100 females, 11 remained sterile. In a total of 697 offspring born in 118 liters, 19.2 per cent presented gross macroscopic malformations detectable at birth. Malformations such as hydrocephalus, spina bifida, tail defects, eye defects and defects of other systems ranged in decreasing numbers, averaging 1.4 anomalies per rat.

1. Gregg, N. McA.; Beavis, W. R.; Heschine, M.; Machin, A. E.; Vickery, D., and Meyers, E.: The Occurrence of Congenital Defects in Children Following Maternal Rubella During Pregnancy, M. J. Australia **2**: 122-126 (July 28) 1945.

2. Wesselhoeft, Conrad: Rubella (German Measles) (Concluded), New England J. Med. **236**: 978-988 (July 26) 1947.

3. Gillman, J.; Gilbert, Christine; Gillman, T., and Spence, Isobel: A Preliminary Report on Hydrocephalus, Spina Bifida and Other Congenital Anomalies in the Rat Produced by Trypan Blue, South African J. M. Sc. **13**: 47-90 (March) 1948.

Timing of dye injection was extremely significant. In female rats that received injections before conception as well as one additional injection during pregnancy, incidence of abnormal pups was 25 per cent. Mother rats given injections the seventh day before conception as well as on the seventh day of pregnancy had an 80 per cent incidence of abnormal pups. Rats receiving only one injection on the day before conception showed a 25 per cent incidence of abnormal pups. Rats receiving one injection, on the sixteenth day before conception, gave birth to pups in which jaundice developed within the first three days of life. Among all offspring, high neonatal mortality, reduction in size of litters, low birth weights and a general retardation of postnatal development occurred.

The authors expressed the belief that the original hypothesis which prompted them to use trypan blue for producing congenital malformations proved efficient. The metabolic effect was operative when rats were fed a balanced diet. Trypan blue was bound to plasma albumin, and the use of the dye could be appropriately manipulated to increase the incidence of malformed offspring to 80 per cent. The authors cite what they consider to be an apparent parallel in the development of congenital defects in offspring of trypan blue–treated rats and defects in infants following maternal rubella infection. It is suggested that the supposed mode of action of the rubella virus on the human fetus be reexamined, as passage of virus through the placental barrier is debatable and as they have demonstrated that the trypan blue in maternal rats did not enter the fetus, the amniotic epithelium or amniotic fluid. All embryonic tissues apart from the yolk sac were free from trypan blue particles.

Discoveries concerning the connection between maternal rubella infection and developmental defects in offspring plus previously known similar effects of diet restriction and irradiation in animals and the described work of Gillman and associates [3] with trypan blue open a tremendously important new field for basic research. If, as the experiments of Gillman and associates tend to demonstrate, the effects of trypan blue and, by inference, rubella virus, are not direct effects on the fetus but cause remote preceding metabolic states which subsequently interfere with fetal development, the speculative number of viruses, bacteria and chemicals which may produce such metabolic effects are legion. Additionally, the reported occurrence of congenital deformities from preconception effects of rubella infection and trypan blue definitely reduce the nature-nurture or heredity-environment argument regarding developmental influences to the preconception period, wherein affective metabolic states in the male must also be properly considered. While this does not diminish the absolute importance of gene influences, it most certainly increases the relative importance and scope of environmental factors to be considered in human development.

Also, of major importance is the fact that an azo dye compound (trypan blue [4]), formerly considered essentially nontoxic and recommended for use in human therapy, has been demonstrated to have serious consequences on development of animal offspring. Establishment of a wider field for testing toxicity of drugs for human use must now be carefully considered.

Current Comment

SARCOMAGENIC CELLOPHANE

In the course of experiments performed on rats to produce hypertension by wrapping cellophane film around one kidney, Oppenheimer [1] and his associates of Columbia University noted that sarcomas developed in several rats in the neighborhood of the cellophane. The sarcomagenic properties of cellophane film were therefore tested on 110 adult male rats. In 55 of these the left kidney was loosely wrapped with "highstretch" cellulose sausage casing, according to the method introduced by Page.[2] In the other 55 rats, a piece of cellophane 1 inch (2.5 cm.) square was embedded subcutaneously in the abdominal wall and kept in place by a surgical suture at each corner. Among the rats with the wrapped kidney, 23 survived over eleven months. Of these, 8, or 34.8 per cent, had large well defined tumors. Of the 55 rats in which the cellophane was embedded subcutaneously, 42 survived beyond eleven months. Of these, 15, or 35.7 per cent, had massive tumors. The tumors were usually allowed to grow to 2 to 5 cm. in diameter before the rats were sacrificed or used for transplantation experiments. Transplantations were made by inoculating tumor fragments subcutaneously into the anterior abdominal wall. A total of 199 secondary tumors were thus produced, of which 73 persisted and 126 subsequently receded. Retransplantations were carried out in some instances to the fifth generation. Histologic examinations showed that of the 23 primary cellophane tumors, there were 17 fibrosarcomas, 2 liposarcomas, 1 rhabdomyosarcoma, 1 plasmocytoma, 1 osteogenic sarcoma and 1 undifferentiated sarcoma. Metastases were noted in 3 cases. Sixty-three of the 73 persistent tumors derived from transplantation were fibrosarcomas. In the perirenal series the shortest time taken for the production of a sarcoma was three hundred and sixty-two days. In the subcutaneous series the shortest period of development was four hundred and seventy-one days. Thus far, there have been no reports of similar delayed sarcomagenic effects from the use of cellophane sheaths or coverings in surgical treatment in human beings. The nature of the sarcomagenic factor in commercial cellophane has not yet been determined.

4. Dorland's American Illustrated Medical Dictionary, twentieth edition, Philadelphia, W. B. Saunders Company, 1947, states, "trypan blue, an acid, azo dye which has been used in vital staining and as a remedy in protozoan infections. It is the sodium salt of toluidin-diazo-diamino-naphthol-disulfonic acid."

1. Oppenheimer, B. S.; Oppenheimer, E. T., and Stout, A. P.: Proc. Soc. Exper. Biol. & Med. 67:33, 1948.

2. Page, I. H.: Science 89:273, 1939. Graef, I., and Page, I. H.: Am. J. Path. 16:211, 1940.

THE INTERIM SESSION

AMERICAN MEDICAL ASSOCIATION

ST. LOUIS, NOV. 30-DEC. 3, 1948

OFFICIAL CALL

TO THE OFFICERS, FELLOWS AND MEMBERS OF THE AMERICAN MEDICAL ASSOCIATION

The interim session of the American Medical Association will be held in St. Louis, Nov. 30-Dec. 3, 1948.

The House of Delegates will convene at 10 a. m., Tuesday, November 30. In the House the representation of the various constituent associations for the interim session in 1948 is as follows:

Alabama	2	Massachusetts	6
Arizona	1	Michigan	5
Arkansas	2	Minnesota	4
California	9	Mississippi	1
Colorado	2	Missouri	4
Connecticut	3	Montana	1
Delaware	1	Nebraska	2
District of Columbia	2	Nevada	1
Florida	2	New Hampshire	1
Georgia	3	New Jersey	5
Idaho	1	New Mexico	1
Illinois	9	New York	29
Indiana	4	North Carolina	3
Iowa	3	North Dakota	1
Kansas	2	Ohio	7
Kentucky	2	Oklahoma	2
Louisiana	2	Oregon	2
Maine	1	Pennsylvania	10
Maryland	2	Rhode Island	1
		South Carolina	1
		South Dakota	1
		Tennessee	2
		Texas	5
		Utah	1
		Vermont	1
		Virginia	2
		Washington	2
		West Virginia	2
		Wisconsin	3
		Wyoming	1
		Alaska	1
		Hawaii	1
		Isthmian Canal Zone	1
		Puerto Rico	1

The scientific sections of the American Medical Association, the Medical Corps of the Army, the Medical Corps of the Navy and the Public Health Service are entitled to one delegate each.

The Scientific Program will open Tuesday, November 30, starting at 2 p. m., and will continue throughout the afternoon of that day. The program will continue on Wednesday and Thursday mornings and afternoons, December 1 and 2, and on Friday morning, December 3, closing at 12 noon. The gold medal for an outstanding general practitioner will be presented on Thursday evening December 2.

The Registration Bureau, which will be located on the lower level of the St. Louis Municipal Auditorium, will be open from 8:20 a. m. until 5:30 p. m., Tuesday, Wednesday and Thursday, November 30 and December 1 and 2, and from 8:30 a. m. to 12:00 noon, Friday, December 3.

R. L. SENSENICH, President.
F. F. BORZELL, Speaker, House of Delegates.
GEORGE F. LULL, Secretary.

OFFICERS OF THE AMERICAN MEDICAL ASSOCIATION 1948—1949

PRESIDENT—R. L. Sensenich, South Bend, Ind.

PRESIDENT-ELECT—Ernest E. Irons, Chicago.

VICE-PRESIDENT—Roy W. Fouts, Omaha.

SECRETARY AND GENERAL MANAGER—George F. Lull, Chicago.

TREASURER—J. J. Moore, Chicago.

SPEAKER, HOUSE OF DELEGATES—F. F. Borzell, Philadelphia.

VICE SPEAKER, HOUSE OF DELEGATES—James R. Reuling, Bayside, N. Y.

EDITOR—Morris Fishbein, Chicago.

BUSINESS MANAGER—Thomas R. Gardiner, Chicago.

BOARD OF TRUSTEES—Louis H. Bauer, Hempstead, N. Y., 1949; E. L. Henderson, Chairman, Louisville, Ky., 1949; John H. Fitzgibbon, Portland, Ore., 1950; James R. Miller, Hartford, Conn., 1950; Walter B. Martin, Norfolk, Va., 1951; Dwight H. Murray, Napa, Calif., 1952; E. J. McCormick, Toledo, Ohio, 1952; Edwin S. Hamilton, Kankakee, Ill., 1953; Gunnar Gundersen, LaCrosse, Wis., 1953.

JUDICIAL COUNCIL—Edward R. Cunniffe, Chairman, New York, 1949; Louis A. Buie, Rochester, Minn., 1950; Walter F. Donaldson, Pittsburgh, 1951; H. L. Pearson Jr., Miami, 1952; John H. O'Shea, Spokane, Wash., 1953; George F. Lull, Chicago, Secretary.

COUNCIL ON MEDICAL EDUCATION AND HOSPITALS—Reginald Fitz, Boston, 1949; Russell L. Haden, Cleveland, 1950; W. S. Middleton, Madison, Wis., 1951; H. G. Weiskotten, Chairman, Syracuse, N. Y., 1952; Victor Johnson, Rochester, Minn., 1953; W. L. Pressly, Due West, S. C., 1954; Harvey P. Stone, Baltimore, 1955; Donald G. Anderson, Secretary, Chicago.

COUNCIL ON SCIENTIFIC ASSEMBLY—Charles H. Phifer, Chicago, 1949; Henry R. Viets, Chairman, Boston, 1950; L. W. Larson, Bismarck, N. D., 1951; Stanley P. Reimann, Philadelphia, 1952; Alphonse McManus, St. Louis, 1953, and ex officio the President-Elect, the Editor and the Secretary of the Association.

COUNCIL ON MEDICAL SERVICE—Elmer Hess, Erie, Pa., 1949; Thomas A. McGoldrick, Brooklyn, 1949; Jesse D. Hamer, Phoenix, Ariz., 1950; James R. McVay, Chairman, Kansas City, Mo., 1950; H. B. Mulholland, Charlottesville, Va., 1951; Joseph D. McCarthy, Omaha, 1951; Edward L. Bortz, Philadelphia; R. L. Sensenich, South Bend, Ind.; Walter B. Martin, Norfolk, Va.; George F. Lull, Chicago; Thomas A. Hendricks, Secretary, Chicago.

COUNCIL ON PHARMACY AND CHEMISTRY (Standing Committee of Board of Trustees)—James P. Leake, Washington, D. C., 1949; D. P. Barr, New York, 1949; W. B. Wood Jr., St. Louis, 1949; M. Fishbein, Chicago, 1950; G. W. McCoy, New Orleans, 1950; P. H. Long, Baltimore, 1950; E. M. Nelson, Washington, D. C., 1950; Torald Sollmann, Chairman, Cleveland, 1951; Isaac Starr, Philadelphia, 1951; R. F. Loeb, New York, 1951; E. M. K. Geiling, Chicago, 1952; S. W. Clausen, Rochester, N. Y., 1952; Paul R. Cannon, Chicago, 1952; E. D. Churchill, Boston, 1953; Joseph Stokes Jr., Philadelphia, 1953; C. Guy Lane, Boston, 1953; Robert T. Stormont, Washington, D. C., 1953; Austin E. Smith, Secretary, Chicago.

COUNCIL ON PHYSICAL MEDICINE (Standing Committee of Board of Trustees)—H. B. Williams, New York, 1949; Frank H. Krusen, Rochester, Minn., 1949; Anthony C. Cipollaro, New York, 1950; M. A. Bowie, Bryn Mawr, Pa., 1950; G. M. Piersol, Philadelphia, 1950; W. E. Garrey, Nashville, Tenn., 1951; W. W. Coblentz, Washington, D. C., 1951; John S. Coulter, Chairman, Chicago, 1951; Derrick Vail, Chicago, 1951; W. E. Grove, Milwaukee, 1951; A. C. Ivy, Chicago, 1952; Frank R. Ober, Boston, 1952; Frank D. Dickson, Kansas City, Mo., 1952; Morris Fishbein, ex officio, Chicago; Howard A. Carter, Secretary, Chicago.

COUNCIL ON FOODS AND NUTRITION (Standing Committee of Board of Trustees)—C. S. Ladd, Washington, D. C., 1949; John B. Youmans, Chicago, 1949; Harold C. Stuart, Boston, 1950; Morris Fishbein, Chicago, 1950; R. M. Wilder, Rochester, Minn., 1951; Howard B. Lewis, Ann Arbor, Mich., 1951; J. S. McLester, Chairman, Birmingham, Ala., 1951; Philip C. Jeans, Iowa City, 1952; C. A. Elvehjem, Madison, Wis., 1952; William J. Darby, Nashville, Tenn., 1952; George R. Cowgill, New Haven, Conn., 1953; James R. Wilson, Secretary, Chicago.

COUNCIL ON INDUSTRIAL HEALTH (Standing Committee of Board of Trustees)—Rutherford T. Johnstone, Los Angeles, 1949; A. J. Lanza, Chairman, New York, 1949; C. D. Selby, Detroit, 1949; Warren F. Draper, Washington, D. C., 1950; Raymond Hussey, Detroit, 1950; Henry H. Kessler, Newark, N. J., 1950; L. D. Bristol, Harrisburg, Pa., 1951; Paul B. Magnuson, Washington, D. C., 1951; Robert A. Kehoe, Cincinnati, 1951; Harold A. Vonachen, Peoria, Ill., 1952; W. A. Sawyer, Rochester, N. Y., 1952; James S. Simmons, Boston, 1952; E. J. McCormick, ex officio, Toledo, Ohio; C. M. Peterson, Secretary, Chicago.

COUNCIL ON NATIONAL EMERGENCY MEDICAL SERVICE (Standing Committee of Board of Trustees)—W. McK. Craig, Rochester, Minn., 1949; Harold S. Diehl, Minneapolis, 1950; Perrin H. Long, Baltimore, 1950; Richard L. Meiling, Columbus, Ohio, 1951; Harold C. Lueth, Omaha, 1951; James C. Sargent, Chairman, Milwaukee, 1952; Stanford Warren, Los Angeles, 1953, and ex officio the President and the Secretary of the Association. Dr. Harold R. Henneseey, Secretary, Chicago.

COMMITTEE ON SCIENTIFIC EXHIBIT—E. J. McCormick, Toledo, Ohio; Dwight H. Murray, Chairman, Napa, Calif.; Gunnar Gundersen, La Crosse, Wis.; Thomas G. Hull, Director, Chicago. Advisory Committee—Howard F. Root, Boston; Paul J. Hanzlik, San Francisco; Ludvig Hektoen, Chicago; Urban Maes, New Orleans; Max M. Peet, Ann Arbor, Mich.; James P. Leake, Washington, D. C.

REGISTRATION

The Bureau of Registration will be located on the lower level of the Municipal Auditorium. An information bureau will be operated in connection with the Bureau of Registration.

Who May Register

Only Member and Service Fellows, Affiliate, Associate and Honorary Fellows, qualified physicians who apply for Fellowship, medical students of approved medical schools, who are certified to the Secretary of the Association by their respective deans, or interns or residents who are graduates of approved medical schools who are certified to the Secretary of the Association by the superintendents of their respective hospitals, and Invited Guests may register for the Scientific Assembly. Fellows of the Scientific Assembly are those who have, on the prescribed form, applied for Fellowship, subscribed to THE JOURNAL, and paid their 1948 Fellowship dues. Fellowship cards are sent to all Fellows after payment of annual dues and these cards should be presented at the registration window. Any who have not received cards for 1948 should secure them at once by writing to the American Medical Association, 535 North Dearborn Street, Chicago 10.

Members in Good Standing Eligible to Apply for Fellowship in the Association

Members in good standing in the American Medical Association are those members of component county medical societies and of constituent state and territorial medical associations whose names are officially reported for enrolment to the Secretary of the American Medical Association by the secretaries of the constituent medical associations. All members in good standing may apply for Fellowship in the Scientific Assembly and are urged to qualify as Fellows before leaving home in order that pocket cards may be secured and brought to St. Louis so that registration can be more easily and more promptly effected.

Application forms may be had on request.

Those subscribers to THE JOURNAL who have not received pocket cards for 1948 should write to the American Medical Association in order to obtain application blanks and information as to further requirements.

Register Early

Fellows living in St. Louis as well as all other Fellows who are in St. Louis on Tuesday and Wednesday should register as early as possible.

The names and local addresses of those who register will be included in the issue of the *Daily Bulletin* appearing the next day, and this will enable visiting physicians to find friends who have registered.

Suggestions That Will Facilitate Registration

Fellows should fill out completely the spaces on both sections of the front of the registration card. Physicians who desire to qualify as Fellows should fill out completely the spaces on both sections of the front of the registration card and sign the application on the back. These cards will be found on the tables.

Entries on the registration card should be written plainly, or printed, as the cards are given to the printer to use as "copy" for the *Daily Bulletin*, which appears on Wednesday, Thursday and Friday mornings during the week of the session.

Fellows who have their pocket cards with them can be registered with little or no delay. They should present the filled out registration card, together with the pocket card, at one of the windows marked "Registration by Pocket Card." There the clerk will compare the two cards, stamp the pocket card and return it and supply the Fellow with a badge and a copy of the official program.

Those Fellows who have sent in their registration card previous to the session should present at any window the identification card sent them after they registered prior to the session.

As previously stated, it will assist in registering if those who desire to qualify as Fellows will file their applications and qualify as Fellows by writing directly to the American Medical Association, 535 North Dearborn Street, Chicago 10.

It will be possible for members of the organization to qualify as Fellows at St. Louis. In order to do this, applicants for Fellowship will be required to fill out both sections of the front of the registration card and to sign the formal application that is printed on the reverse side of the card. It is suggested that those members who apply for Fellowship at St. Louis bring with them their state membership cards for the year 1948. The state membership card should be presented along with the filled in registration card at the window in the booth marked "Applicants for Fellowship and Invited Guests."

As already stated, registration can be effected more easily and more promptly if members will qualify as Fellows before leaving home.

Registration for General Officers and Delegates

General officers of the American Medical Association and members of the House of Delegates may register for the Scientific Assembly outside Assembly Room 2 on the second floor of the Municipal Auditorium on Tuesday, November 30, before registering with the Reference Committee on Credentials and are advised *not* to register at the Registration Bureau since registration cards have already been made out for their use at Assembly Room 2. It will also be possible for them to register on Sunday, November 28, or Monday morning, November 29, in the office of the Secretary of the Association, Room 116, Hotel Statler.

This arrangement is made for the convenience of members of the House of Delegates, which will convene on Tuesday morning at 10 o'clock in Assembly Room 2 of the Municipal Auditorium. Delegates are requested to register for the Scientific Assembly before presenting credentials to the Reference Committee on Credentials of the House of Delegates. Delegates are urged to register early so that all members of the House of Delegates may be seated in time for the opening session of the House.

TRANSPORTATION

It is suggested that those Fellows who contemplate traveling to St. Louis to attend the interim session of the Association secure information concerning railroad and airplane travel directly from their local ticket agents, who are in a position to give them information regarding train or plane schedules and fares.

ST. LOUIS HOTELS

It is suggested that if hotel reservations have not yet been secured by Fellows who expect to attend the St. Louis session, such Fellows filling in and sending directly to DR. F. G. PERNOUD, SUBCOMMITTEE ON HOTELS, 1420 Syndicate Trust Building, St. Louis 1, Mo., the application form which may be found in the advertising pages of this JOURNAL.

MEETING PLACES

HOUSE OF DELEGATES: Assembly Room 2, St. Louis Municipal Auditorium.

SCIENTIFIC MEETINGS: Opera House, Assembly Room 1 and rooms in Scientific Exhibit, all in St. Louis Municipal Auditorium.

PRESENTATION OF GENERAL PRACTITIONER'S MEDAL: Opera House, St. Louis Municipal Auditorium.

GENERAL HEADQUARTERS, REGISTRATION BUREAU, SCIENTIFIC EXHIBIT, TECHNICAL EXHIBITS AND INFORMATION BUREAU: St. Louis Municipal Auditorium.

Wednesday evening entertainment in Opera House of Municipal Auditorium, 7:30 p. m.

The St. Louis Municipal Auditorium is located on Fourteenth Street at Market Street.

LOCAL COMMITTEE ON ARRANGEMENTS

Robert E. Schlueter, Chairman
Llewellyn Sale, Co-chairman

Robert J. Mueller — William E. Leighton
J. William Thompson — Armand D. Fries

Subcommittee on Hotels

F. G. Pernoud, Chairman
Robert G. Warner — Stephen M. Tapper

Subcommittee on Transportation

Robert F. Hyland, Chairman
Thomas R. Kennedy — Leo A. Will

Subcommittee on Information and Registration

Robert C. McElvain, Chairman

Delevan Calkins — K. V. Larsen
J. Roy Compton — Charles E. Martin
George J. Fuchs — L. A. Millikin
Elmer G. Graul — Grace S. Mountjoy
Otey S. Jones — W. O. Mowrey
Charles A. Jost — S. E. Pawol
Harry A. Klein — C. W. Schumacher
Victor F. Kloepper — William F. Wagenbad

Leon F. Weyerich

Subcommittee on General Meeting

Cyrus E. Burford, Chairman
George F. Rendleman, Charles E. Eimar

Subcommittee on Television

R. Dean Woolsey, Chairman
William A. Knight Jr. — Charles L. Eckert
Samuel Bukants
with the cooperation of
Rev. Alphonse M. Schwitalla and Dr. Robert A. Moore

Subcommittee on Scientific Meetings

Alphonse McMahon, Chairman
Daniel L. Sexton, Co-Chairman

DIABETES
Howard F. Root, Boston, Coordinator
William H. Olmsted, Chairman
B. Y. Glassberg — Wayne O. Gorla

CANCER
Brewster S. Miller, American Cancer Society, New York, Coordinator
Sherwood Moore, Chairman

POLIOMYELITIS
Catherine Worthingham, National Foundation for Infantile Paralysis, New York, Coordinator
Sedgwick Mead, Chairman

HEART AND HYPERTENSION
George R. Herrmann, Galveston, Texas, Coordinator
O. P. J. Falk, Chairman
Drew W. Luten — Arthur E. Strauss
E. Lee Shrader — James B. Stubbs
John E. Smith

OBSTETRICS AND GYNECOLOGY
Arthur B. Hunt, Rochester, Minn., Coordinator
Joseph A. Hardy Jr., Chairman
Willard M. Allen — G. D. Royston
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PEDIATRICS
Hugh McCulloch, Coordinator
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Henry Pinkerton — Hollis N. Allen

DERMATOLOGY
Richard S. Weiss, Coordinator
Clinton W. Lane, Chairman
George A. Manting — James W. Bagby
A. H. Conrad Jr.

HEMATURIA
Edward N. Cook, Rochester, Minn., Coordinator
Grayson Carroll, Chairman
Carl A. Wattenberg — Edward M. Cannon
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Justin J. Cordonnier

JAUNDICE
Sidney Portis, Chicago, Coordinator
R. O. Meuther, Chairman

ROENTGEN DIAGNOSIS
Paul C. Hodges, Coordinator
Wendell G. Scott, Chairman
Joseph C. Peden — Leroy Sante

PHYSICAL MEDICINE AND ARTHRITIS
C. H. Slocumb, Rochester, Minn., Coordinator
Ralph A. Kinsella, Chairman

HOUSE OF DELEGATES

The House of Delegates will meet at 10 a. m., Tuesday, Nov. 30, 1948, in Assembly Room 2, Municipal Auditorium, Fourteenth Street at Market Street.

The Reference Committee on Credentials will meet in the foyer outside Assembly Room 2 at 8:30 a. m., Tuesday, Nov. 30, 1948. Credentials should be presented to the Reference Committee on Credentials as early as possible, so that the official roll of the House may be made up and so that the House of Delegates may organize promptly and proceed with its business. The Reference Committee on Credentials will also meet preceding each subsequent meeting of the House of Delegates.

Each delegate should present properly executed credentials signed by the president and the secretary of the constituent association or by the chairman and the secretary of the section he represents. Alternates presenting credentials should see that the delegates whose places they are to take have signed the alternate authorization.

Each delegate, before registering with the Reference Committee on Credentials, should register for the Scientific Assembly at a booth located at the head of the stairs leading to the lobby where the Reference Committee on Credentials will register delegates.

Rooms have been provided for the use of committees of the House of Delegates. Reference committees are urged to have their meetings in these rooms and to announce the time of their meetings, so that any who are interested in matters referred may be able to appear before the committees.

Typists will be at the service of the members of the House of Delegates for preparing official reports, resolutions and motions.

There should be eight copies of all reports of committees, resolutions, written motions, etc., presented in the House, one copy for preservation in the minutes, six to go to the committee to which the matter may be referred and one to be used as "copy" for the Proceedings. The eight copies must be handed to the Secretary at the time the matter is presented. Typists in attendance will gladly make these copies on request.

MEETING ROOMS OF REFERENCE COMMITTEES IN THE MUNICIPAL AUDITORIUM

Reference Committee on—

- Amendments to the Constitution and By-Laws ..... Committee Room B(1), Second Floor
- Hygiene and Public Health ..... Committee Room A, Second Floor
- Legislation and Public Relations ..... Committee Room B(2), Second Floor
- Medical Education ..... Room H1D2, Mezzanine, between second and third floors
- Miscellaneous Business ..... Committee Room 3D, Third Floor
- Reports of Board of Trustees and Secretary ..... Committee Room 3A, Third Floor
- Reports of Officers ..... Committee Room 3C, Third Floor
- Rules and Order of Business ..... Committee Room 4C, Fourth Floor
- Sections and Section Work ..... Committee Room, 4A, Fourth Floor
- Executive Session ..... Committee Room 3B, Third Floor
- Special ..... Committee Rooms 4B and 4D Fourth Floor

MEMBERS OF HOUSE OF DELEGATES, INTERIM SESSION, 1948

The following is a list of members of the House of Delegates:

ALABAMA—2
- B. W. McNease ..... Fayette
- Daniel G. Gill ..... Montgomery

ARIZONA—1
- Jesse D. Hamer ..... Phoenix

ARKANSAS—2
- D. A Rhinehart ..... Little Rock
- William R. Brooksher ..... Fort Smith

CALIFORNIA—9
- H. Gordon MacLean ..... Oakland
- E. Vincent Askey ..... Los Angeles
- John W. Cline ..... San Francisco
- Donald Cass ..... Los Angeles
- Ralph B. Eusden ..... Long Beach
- Robertson Ward ..... San Francisco
- Samuel J. McClendon ..... San Diego
- Lowell S. Goin ..... Los Angeles
- John W. Green ..... Vallejo

COLORADO—2
- Herman C. Graves ..... Grand Junction
- William H. Halley ..... Denver

CONNECTICUT—3
- Joseph H. Howard ..... Bridgeport
- Creighton Barker ..... New Haven
- Thomas P. Murdock ..... Meriden

DELAWARE—1
- James Beebe ..... Lewes

DISTRICT OF COLUMBIA—2
- C. B. Conklin ..... Washington
- Herbert P. Ramsey ..... Washington

FLORIDA—2
- Homer Lee Pearson Jr. ..... Miami
- Louis M. Orr II ..... Orlando

GEORGIA—3
- Olin H. Weaver ..... Macon
- Allen H. Bunce ..... Atlanta
- Benjamin H. Minchew ..... Waycross

IDAHO—1
- Hoyt B. Woolley ..... Idaho Falls

ILLINOIS—9
- Robert H. Hayes ..... Chicago
- Fred H. Muller ..... Chicago
- Bernard Klein ..... Joliet
- Mather Pfeiffenberger ..... Alton
- E. H. Weld ..... Rockford
- Rollo K. Packard ..... Chicago
- Charles H. Phifer ..... Chicago
- G. Henry Mundt ..... Chicago
- Willis I. Lewis ..... Herrin

INDIANA—4
- H. G. Hamer ..... Indianapolis
- A. S. Giordano ..... South Bend
- William M. Cockrum ..... Evansville
- F. S. Crockett ..... Lafayette

IOWA—3
- Gerald V. Caughlan ..... Council Bluffs
- Thomas F. Thornton ..... Waterloo
- George Braunlich ..... Davenport

KANSAS—2
- Philip W. Morgan ..... Emporia
- John M. Porter ..... Concordia

KENTUCKY—2
- Clark Bailey ..... Harlan
- J. B. Lukins ..... Louisville

LOUISIANA—2
- Val H. Fuchs ..... New Orleans
- James Q. Graves ..... Monroe

MAINE—1
- Thomas A. Foster ..... Portland

MARYLAND—2
- JACOB W. BIRD ..... Sandy Spring
- Warde B. Allan ..... Baltimore

MASSACHUSETTS—6
- Charles J. Kickham ..... Brookline
- L. S. McKittrick ..... Boston
- Patrick J. Sullivan ..... Dalton
- John J. Curley ..... Leominster
- Walter G. Phippen ..... Salem
- Frank W. Snow ..... Newburyport

MICHIGAN—5
L. G. Christian....Lansing
William A. Hyland....Grand Rapids
Wyman D. Barrett....Detroit
T. K. Gruber....Eloise
Claude R. Keyport....Grayling

MINNESOTA—4
W. A. Coventry....Duluth
J. C. Hultkrans....Minneapolis
E. W. Hansen....Minneapolis
Francis J. Savage....St. Paul

MISSISSIPPI—1
James P. Wall....Jackson

MISSOURI—4
Robert E. Schlueter....St. Louis
James R. McVay....Kansas City
Howard B. Goodrich....Hannibal
Warren L. Allee....Eldon

MONTANA—1
Raymond F. Peterson....Butte

NEBRASKA—2
Karl S. J. Hohlen....Lincoln
Joseph D. McCarthy....Omaha

NEVADA—1
Roland W. Stahr....Reno

NEW HAMPSHIRE—1
Deering G. Smith....Nashua

NEW JERSEY—5
J. Wallace Hurff....Newark
Thomas K. Lewis....Camden
Joseph F. Londrigan....Hoboken
William F. Costello....Dover
David B. Allman....Atlantic City

NEW MEXICO—1
John F. Conway....Clovis

NEW YORK—20
Walter P. Anderton....New York
Herbert H. Bauckus....Buffalo
Albert F. R. Andresen....Brooklyn
Thomas M. Brennan....Brooklyn
James R. Reuling....Bayside
Floyd S. Winslow....Rochester
Ralph T. B. Todd....Tarrytown
O. W. H. Mitchell....Syracuse
Edward P. Flood....New York
Albert A. Gartner....Buffalo
John J. Masterson....Brooklyn
J. Stanley Kenney....New York
Thomas A. McGoldrick....Brooklyn
Andrew A. Eggston....Mount Vernon
Harry Aranow....New York
Peter J. DiNatale....Batavia
George W. Kosmak....New York
Stephen R. Monteith....Nyack
Joseph P. Henry....Rochester
S. L. Smith....Poughkeepsie

NORTH CAROLINA—3
R. D. McMillan....Red Springs
C. F. Strosnider....Goldsboro
Ross S. McElwee....Statesville

NORTH DAKOTA—1
John H. Moore....Grand Forks

OHIO—7
L. Howard Schriver....Cincinnati
Clifford C. Sherburne....Columbus
Frank M. Wiseley....Findlay
Edgar P. McNamee....Cleveland
Carl A. Lincke....Carrollton
George A. Woodhouse....Pleasant Hill
William M. Skipp....Youngstown

OKLAHOMA—2
Charles R. Rountree....Oklahoma City
James Stevenson....Tulsa

OREGON—2
Raymond M. McKeown....Coos Bay
Edward H. McLean....Oregon City

PENNSYLVANIA—10
William Bates....Philadelphia
Francis F. Borzell....Philadelphia
Walter F. Donaldson....Pittsburgh
Charles L. Shafer....Kingston
William L. Estes Jr....Bethlehem
James L. Whitehill....Rochester
George S. Klump....Williamsport
Elmer Hess....Erie
James Z. Appel....Lancaster
E. R. Samuel....Mount Carmel

RHODE ISLAND—1
Herman A. Lawson....Providence

SOUTH CAROLINA—1
Hugh P. Smith....Greenville

SOUTH DAKOTA—1
H. Russell Brown....Watertown

TENNESSEE—2
H. B. Everett....Memphis
Robert B. Wood....Knoxville

TEXAS—5
Howard R. Dudgeon....Waco
B. E. Pickett Sr....Carrizo Springs
E. H. Cary....Dallas
F. J. L. Blasingame....Wharton
Allen T. Stewart....Lubbock

UTAH—1
James P. Kerby....Salt Lake City

VERMONT—1
Theodore H. Harwood....Burlington

VIRGINIA—2
Henry B. Mulholland....Charlottesville
J. Morrison Hutcheson....Richmond

WASHINGTON—2
Donald G. Corbett....Spokane
Raymond L. Zech....Seattle

WEST VIRGINIA—2
Walter E. Vest....Huntington
Ivan Fawcett....Wheeling

WISCONSIN—3
William D. Stovall....Madison
Stephen E. Gavin....Fond du Lac
James C. Sargent....Milwaukee

WYOMING—1
George P. Johnston....Cheyenne

ALASKA—1
Paul B. Haggland....Fairbanks

HAWAII—1
Forrest J. Pinkerton....Honolulu

ISTHMIAN CANAL ZONE—1
Harry Eno....Christobal

PUERTO RICO—1
Carlos E. Munoz-MacCormick....Santurce

DELEGATES FOR SECTIONS

INTERNAL MEDICINE
Charles T. Stone....Galveston, Texas

SURGERY, GENERAL AND ABDOMINAL
Grover C. Penberthy....Detroit

OBSTETRICS AND GYNECOLOGY
Jean Paul Pratt....Detroit

OPHTHALMOLOGY
Sylvester Judd Beach....Portland, Maine

LARYNGOLOGY, OTOLOGY AND RHINOLOGY
Burt R. Shurly....Detroit

PEDIATRICS
William Weston....Columbia, S. C.

EXPERIMENTAL MEDICINE AND THERAPEUTICS
Edgar V. Allen....Rochester, Minn.

PATHOLOGY AND PHYSIOLOGY
L. W. Larson.....Bismarck, N. D.
NERVOUS AND MENTAL DISEASES
Hans H. F. Reese.....Madison, Wis.
DERMATOLOGY AND SYPHILOLOGY
Everett C. Fox.....Dallas, Texas
PREVENTIVE AND INDUSTRIAL MEDICINE AND PUBLIC HEALTH
Stanley H. Osborn.....Hartford, Conn.
UROLOGY
Roy B. Henline.....New York
ORTHOPEDIC SURGERY
Edward L. Compere.....Chicago
GASTRO-ENTEROLOGY AND PROCTOLOGY
Louis A. Buie.....Rochester, Minn.
RADIOLOGY
B. R. Kirklin.....Rochester, Minn.
ANESTHESIOLOGY
Henry S. Ruth.....Haverford, Pa.
GENERAL PRACTICE
Howard E. Griffin.....Graham, Texas

GOVERNMENT SERVICES

United States Army.....George E. Armstrong
United States Navy.....Joel T. Boone
United States Public Health Service.....W. Palmer Dearing

PERSONNEL OF REFERENCE COMMITTEES FOR THE ST. LOUIS SESSION

SECTIONS AND SECTION WORK

Henry S. Ruth, Chairman, Section on Anesthesiology
Jean Paul Pratt, Section on Obstetrics and Gynecology
Benjamin H. Minchew, Georgia
Homer L. Pearson Jr., Florida
Thomas A. Foster, Maine

RULES AND ORDER OF BUSINESS

Philip W. Morgan, Chairman, Kansas
Stephen R. Monteith, New York
Edward H. McLean, Oregon
Ivan Fawcett, West Virginia
Wyman D. Barrett, Michigan

MEDICAL EDUCATION

George W. Kosmak, Chairman, New York
William Bates, Pennsylvania
Mather Pfeiffenberger, Illinois
Louis A. Buie, Section on Gastro-Enterology and Proctology
Warde B. Allan, Maryland

LEGISLATION AND PUBLIC RELATIONS

Thomas K. Lewis, Chairman, New Jersey
Edgar P. McNamee, Ohio
John W. Cline, California
Charles H. Phifer, Illinois
Edward H. Cary, Texas

HYGIENE AND PUBLIC HEALTH

Stanley H. Osborn, Chairman, Section on Preventive and Industrial Medicine and Public Health
W. Palmer Dearing, U. S. Public Health Service
Gerald V. Caughlan, Iowa
George S. Klump, Pennsylvania
Albert F. R. Andresen, New York

AMENDMENTS TO CONSTITUTION AND BY-LAWS

Lowell S. Goin, Chairman, California
James P. Wall, Mississippi
William R. Brooksher, Arkansas
Floyd S. Winslow, New York
Val H. Fuchs, Louisiana

REPORTS OF OFFICERS

James Z. Appel, Chairman, Pennsylvania
Joshua B. Lukins, Kentucky
Rollo K. Packard, Illinois
Deering G. Smith, New Hampshire
E. Vincent Askey, California

REPORTS OF BOARD OF TRUSTEES AND SECRETARY

Creighton Barker, Chairman, Connecticut
Lloyd Noland, Alabama
Samuel J. McClendon, California
Hans H. F. Reese, Section on Nervous and Mental Diseases
Fred H. Muller, Illinois

CREDENTIALS

Hiram B. Everett, Chairman, Tennessee
Carl A. Lincke, Ohio
Edward P. Flood, New York
Raymond F. Peterson, Montana
Charles F. Strosnider, North Carolina

MISCELLANEOUS BUSINESS

Joseph D. McCarthy, Chairman, Nebraska
Herbert H. Bauckus, New York
Britton E. Pickett Sr., Texas
James P. Kerby, Utah
J. Wallace Hurff, New Jersey

EXECUTIVE SESSION

J. Stanley Kenney, Chairman, New York
Jesse D. Hamer, Arizona
Claude R. Keyport, Michigan
Erling W. Hansen, Minnesota
Walter G. Phippen, Massachusetts

SERGEANTS-AT-ARMS

James L. Whitehill, Chairman, Pennsylvania
Herman A. Lawson, Assistant, Rhode Island
Hugh P. Smith, Assistant, South Carolina

TELLERS

Roland W. Stahr, Chairman, Nevada
John F. Conway, New Mexico
John H. Moore, North Dakota
William M. Skipp, Ohio
James Stevenson, Oklahoma

Order of Business

(Subject to change by action of the House of Delegates)

TUESDAY, NOVEMBER 30, 10 A. M.

1. Call to Order by the Speaker.
2. Preliminary Report of the Reference Committee on Credentials.
3. Roll Call.
4. Selection of Recipient of General Practitioner's Award.
5. Presentation, Correction and Adoption of Minutes of the Annual Session held in June, 1947.
6. Speaker's Remarks and Confirmation of Appointments to Reference Committees.
7. Remarks of President.
8. Introduction of President-Elect.
9. Reports of Officers.
10. Reports of Committees.
11. Unfinished Business.
12. New Business.

WEDNESDAY, DECEMBER 1, 1:15 P. M.

1. Supplementary Report of Reference Committee on Credentials.
2. Reading and Adoption of Minutes.
3. New Business.
4. Executive Session.
5. Reports of Reference Committees and Other Unfinished Business.

REPORTS OF OFFICERS

REPORT OF THE SECRETARY

To the Members of the House of Delegates of the American Medical Association:

The following report of the Secretary is respectfully submitted:

MEMBERSHIP AND FELLOWSHIP

Heretofore in making annual reports of membership and Fellowship, the Secretary has reported the number of members and Fellows as of March 1 or April 1. Now that the House of Delegates has decided to receive annual reports only at its interim sessions, and also since the revised Constitution and By-Laws adopted at the 1948 annual session provides that the apportionment of delegates shall be made annually in accordance with the number of members in each constituent association as of December 1, in 1949 and thereafter it will be possible to present the usual comparative table showing the organization of constituent associations on December 1. The current report covers the nine month period from Jan. 1 to Oct. 1, 1948.

On Jan. 1, 1948, 135,518 physicians were members of the American Medical Association and 76,278 were Fellows. On October 1 the membership roll contained 139,776 names and the number of names on the Fellowship roster had increased to 78,331. The increase in membership over the nine month period was 4,258, and that in Fellowship was 2,053. Thus, the Association continues to grow in strength of numbers.

Steps have been taken to procure the names of physicians who are members of the permanent medical staff of the Veterans Administration in order that, in accordance with the action of the House of Delegates in June, their names may be entered as those of Service Fellows of the American Medical Association in the same manner as are the names of the regular medical officers of the Army, Navy and Public Health Service. The complete roster of Veterans Administration physicians is not yet available. It is anticipated that when the names are received there will be a substantial increase in the number of names on the Fellowship roster.

FIELD ACTIVITY

During the year 1948 the Secretary has visited constituent medical associations in seven states and one territory, namely; California, Texas, New York, Wyoming, Colorado, Kentucky, Wisconsin and Hawaii. With the exception of the visit to the Hawaii Territorial Medical Association, these visits have all been made at the time of annual meetings, and the Secretary has spoken at each meeting on the work and accomplishments of the American Medical Association. In addition, the Secretary is a member of a number of committees of government and other agencies in the medical field and has attended numerous meetings in various places. In all cases, trips away from the office have been arranged so as not to conflict with the regular business of the Association, and that has been easier to accomplish this year because the Assistant Secretary, Dr. Ernest B. Howard, has been available at all times in the absence of the Secretary.

RÉSUMÉ OF MATTERS REFERRED BY HOUSE OF DELEGATES

Through his own office or by reference to the proper departments at headquarters, the Secretary has carried out the mandates of the House of Delegates at the Chicago Session as follows:

Resolution on Method of Selecting Each Year the Outstanding General Practitioner by the American Medical Association: A letter incorporating this resolution was sent to the secretary of each constituent state and territorial medical association.

Resolutions on American Physicians Art Association: These resolutions were transmitted in a letter to the secretary of that organization.

Election of Honorary Fellows: Appropriate letters accompanied by Certificates were sent to the three foreign physicians elected to Honorary Fellowship.

Recommendation that Constituent Associations Set Terms of Delegates to Begin on January 1 Following Elections: The revised Constitution and By-Laws solves this problem. The attention of each state and territorial association secretary has been called to the change, and the information has been further disseminated through the Secretary's Letter.

Resolutions on Paying Physicians Engaged in Examinations for Armed Forces: A letter conveying these resolutions was sent to the Director of the Selective Service System. His reply is contained in the Report of the Board of Trustees.

Resolution on Policy of Federal Children's Bureau: This resolution was transmitted in a letter to Hon. Oscar R. Ewing, Federal Security Administrator, and his reply will be found in the Report of the Board of Trustees.

Resolution Requesting Veterans Administration to Put into Uniform Practice a Free Choice Regulation for Medical and Hospital Treatment: A letter concerning this was sent to the Chief Medical Director of the Veterans Administration.

Resolution on Funds to Defray Expenses of Woman's Auxiliaries of States: The secretary of each state association received a letter calling attention to this resolution.

Resolutions on Advancement in Rank of Surgeons General of Army and Navy and of Air Surgeon: Letters transmitting these resolutions were sent to the President, the Secretary of Defense, the Secretaries of the Army, Navy and Air Force and the members of the Committee on Armed Services of the Senate and the House of Representatives. Acknowledgments have been received from most of those to whom the communication was sent.

Resolution on Staff Personnel at Headquarters: Employees have been advised that they cannot take either a positive or a negative stand on any legislative matter pending before the House of Delegates.

Recommendations contained in the Report of the Committee to Study Conditions of General Practice and in the Report of the Committee on Intern Placement, and the Resolutions on Association of Interns and Medical Students and on Shortage of Interns are referred to in the Report of the Council on Medical Education and Hospitals.

A report of action with respect to the Resolution on Compulsory Cash Sickness Compensation (the "Rhode Island Resolution") is included in the Report of the Council on Medical Service and the Report of the Board of Trustees.

Resolutions on Hospital Exploitation of Medical Services and the Resolution on Approval of Hospitals were referred to the Committee on Hospitals and the Practice of Medicine, Dr. Elmer Hess, Pennsylvania, Chairman.

Bureau of Legal Medicine and Legislation instructed to study the laws of the several states to determine whether a corporation may lawfully practice medicine: The Bureau now has under way a comprehensive study.

The intent of the resolution concerning the interest of the American Medical Association in a medical graduate program in the armed forces, the resolution commending the Secretary of Defense for appointment of a Committee on Medical and Hospital Services of the Armed Forces, and the resolution urging appointment of a Civilian Medical Coordinating Board to advise the National Security Resources Board was transmitted to the President, the Secretary of Defense and the Secretaries of the Army, Navy and Air Force before the close of the Chicago Session.

Resolutions on Emergency Medical Service: The Council on National Emergency Medical Service is engaged in efforts to carry out the intent of these resolutions.

The following resolutions have been referred to the Board of Trustees, and reference to them will be found in the Report of the Board: Resolutions on Federal Grants-In-Aid to States; Resolution on Compulsory Cash Sickness Compensation; Resolution on Cancer Detection Centers.

RESOLUTIONS AND MEMORIALS

No resolutions or memorials for presentation to the House of Delegates at the interim session have been received from any delegate or any constituent association.

In Appreciation

The Secretary wishes to express his grateful appreciation for the many courtesies extended to him throughout the year by the officers, delegates, members of councils and committees and members and Fellows. The Office of the Secretary of the American Medical Association is open at all times to any member who may wish to visit it.

The Secretary wishes to express particularly his appreciation of the fine and loyal service extended by so many employees at the headquarters office during a trying year.

Respectfully submitted,

George F. Lull, Secretary.

REPORT OF THE BOARD OF TRUSTEES

To the Members of the House of Delegates of the American Medical Association:

The following annual report of the Board of Trustees is respectfully submitted to the House of Delegates.

Income and Expenditures

At the Cleveland Interim Session of the House of Delegates Fellowship dues and subscriptions to The Journal were increased from $8 to $12. This increase was necessary in order to balance the budget for 1948; a deficit for 1947 was already realized.

Recapitulation

	1948	1947	1946	1945
Income exhibit A	$3,614,000	$3,061,862	$3,076,612	$2,909,914
Expense exhibit B	3,446,637	3,112,649	2,970,244	1,939,206
Gain	167,363		106,368	940,708
Loss		50,847		

A Report of Income in Years Indicated

	1948 Partly Estimated		1947 Actual		1946 Actual		1945 Actual	
Fellowship and subscriptions	G*	$1,450,427	G	$ 9,6,844	G	$ 937,077	G	$ 868,054
Advertising JAMA	G	2,115,000	G	2,0.6,813	G	1,772,508	G	1,804,878
Sundry printing and insignia sales	G	35,867	G	44,806	G	55,525	G	56,815
Income and gains or losses from sale of investments	G	133,024	G	133,790	G	307,594	G	122,621
Sessions	G	8,481	L	61,334	G	5,564	L	5,439
Printing and publishing typical journals, index and Hygeia	L†	188,798	L	61,317	G	48,634	G	291,755
Total		$3,614,000		$3,061,862		$3,076,612		$2,909,914

* Gain. † Loss.

A Report of Expenses for Year Indicated

	1948 Partly Estimated	1947 Actual	1946 Actual	1945 Actual
Councils, Bureaus, Committees and Secretary's Office	$1,199,704	$1,128,427	$ 800,178	$ 557,611
Journal operating expenses	2,050,780	1,813,776	1,570,308	1,215,540
Taxes, annuities and legal; 1946 includes settlement for retroactive payment of unemployment tax to state of Illinois	196,173	170,446	599,757	146,055
Total	$3,446,637	$3,112,649	$2,970,244	$1,939,206

Expenditures for Selected Items in Year Indicated

	1948 Partly Estimated	1947 Actual	1946 Actual	1945 Actual
Wages and salaries	$2,480,864	$2,347,671	$1,916,310	$1,347,149
Paper stock	660,000	554,972	422,000	298,056
Engravings	116,000	68,534	57,004	45,326
Building maintenance	85,474	79,9.4	70,424	43,.81
Postage, first class	76,.59	94,.60	79,906	48,622
Postage, second class	75,963	95,315	83,.69	63,479

This increase has been the means of keeping the Association's financial head above water. Increases in wages, salaries, material and services have caused a considerable increase in expenditures.

Following are figures showing sums expended for the major activities of the Association in 1948 (estimated), compared with amounts expended in 1945, 1946 and 1947 for similar activities, as well as a comparison of receipts in these years:

The Journal of The American Medical Association

The circulation of The Journal continues to be maintained at its peak. The JAMA, as it is called in Europe, is recognized everywhere as the leading medical periodical. Through recommendation by the State Department, it is now published regularly in a condensed edition in the Japanese language, and negotiations have been proposed to publish a condensed edition in Italian and in Spanish.

So numerous are the requests for exchange with The Journal from publications in other countries that it has become necessary to restrict the exchange list rigidly.

With the availability of many foreign periodicals, the Current Medical Literature columns are being enlarged and more abstracts of original articles are being published.

The Foreign Correspondence in The Journal has been elaborated further.

Special issues are regularly devoted to medical education, hospitals, state board licensure, the Annual Session, the Interim Session and the indexes.

The columns of The Journal have been so pressed for space that the Editor welcomes the new action of the Council on Scientific Assembly in restricting some of the sections, which are now numerous, to two meetings instead of three meetings at a session.

The Councils, Bureaus, Committees and departments of the Association are now so numerous that they constitute a special problem with relationship to space in The Journal. The Board of Trustees has under consideration a special publication to be devoted largely to the social, economic and industrial aspects of medicine. Nevertheless, The Journal is the one publication most widely read by the medical profession as shown by innumerable surveys and the activities of these various agencies are so important that they should be kept constantly before the medical profession.

During 1947-1948 The Journal published a series of articles on cancer in cooperation with the American Cancer Society. These attracted major interest and are now in process of being published in book form. A series of articles is also in process on nutrition, and these too will be published in book form when completed.

The weekly average net paid circulation of The Journal and the weekly average of copies printed cannot be reported at this time, since the necessary figures will not be compiled until after the first of the year. However, the reports as of Sept. 1, 1948, show that on that date the number of copies circulated was 142 less than on Jan. 1, 1948.

Field Service of the Editorial Staff

Many calls come to the editorial staff of the American Medical Association for addresses on a variety of subjects to audiences of both the medical profession and the public. They participate also in educational courses before various medical societies and educational institutions.

Special Journals

During the time of the labor difficulties with Local 16, Chicago Typographical Union, March 8 to June 28, the publication of the special journals was suspended. As negotiations with the Union seemed to be unsuccessful and it appeared that the difficulties might continue indefinitely, arrangements were made with a Tennessee concern to publish the special journals. Since May manuscripts have been sent to Tennessee to be put into type. Thus far three issues have been printed and distributed

from Nashville, but eight additional issues are in course of completion.

In August it was decided to bring three of the periodicals back to the Association's plant, the ARCHIVES OF SURGERY, the ARCHIVES OF OPHTHALMOLOGY and OCCUPATIONAL MEDICINE. With the two plants working on the periodicals, the usual schedules should be reached by the end of the year.

In spite of the labor difficulties and a shortage of help in the Editorial Department, every effort has been made to maintain the high quality of the periodicals. Two additional manuscript editors have recently been added to the staff.

A supplement to the March issue of the ARCHIVES OF DERMATOLOGY AND SYPHILOLOGY was published containing society transactions only because the reports of fourteen dermatologic societies are received for publication in that periodical. Most of these societies hold nine meetings a year, which means that over one hundred reports are received each year. Many of the reports have been so long that during the paper shortage a considerable backlog occurred. The Editorial Board is now culling unimportant material from these reports, and after the publication of another supplement this fall it will be possible to keep up to date with the publication of the reports of these societies.

The September issue of the ARCHIVES OF DERMATOLOGY AND SYPHILOLOGY will be a festschrift in honor of Dr. George Miller MacKee.

According to the estimates made by the Accounting Department, there will be a gain for the year of $35,733 on five of the special journals and a loss of $21,918 on the other four, making a net gain of $13,815 on the nine journals.

Standard Nomenclature of Disease and Standard Nomenclature of Operations

The success of this publication has been outstanding. A new committee has been organized to produce a new edition of the Standard Nomenclature, and Dr. George Baehr, who served as chairman of the previous committee, will be chairman of the new committee. The remaining members of the committee include:

Dr. James R. Miller, Hartford, Conn.
Dr. Halbert L. Dunn, Washington, D. C.
Dr. Selwyn E. Collins, Washington, D. C.
Dr. Edward T. Thompson, Chicago.
Dr. Edwin L. Crosby, Baltimore.
Dr. Morris Fishbein, Chicago.
Dr. R. J. Plunkett, Chicago.
Mrs. Adaline Hayden, Chicago.

This committee will hold its meeting in December 1948 and at that time will organize the development of the new edition. The Standard Nomenclature is used throughout the world, and translations have been made into Portuguese.

Hygeia

HYGEIA is the leading publication in the health field in the United States. As a source for authentic material, it is used by schools, educational groups, industrial organizations, lecturers and voluntary health organizations. HYGEIA is more quoted by various digest magazines than any other publication in the United States. Many newspapers and radio stations also utilize HYGEIA as a source of material. HYGEIA has aided campaigns against poliomyelitis, cancer and heart disease and for the improvement of sanitation. The American Red Cross has cooperated with articles regularly published in HYGEIA. A special section has been developed dealing with child care and behavior.

Over a period of more than twenty-five years HYGEIA has yielded a profit to the Association. However, the periodical is published as an educational, philanthropic venture and not with the idea primarily of producing income. In 1947, for the first time in seven years, HYGEIA had a loss. It now has, however, a new high in circulation, and much of the loss represents funds expended to increase circulation.

Because of the demands on the press of the American Medical Association it has been impossible to continue printing the publication on the American Medical Association press. It is now printed by Kable Brothers in Mount Morris, Ill.

Book Publications

The American Medical Association press has in the past issued many books which have attained large circulation among the medical profession. Some of these books represent compilations of series of articles published in THE JOURNAL; others originated with individual Councils and Bureaus of the Association. The increasing demands made on the press of the Association made it impossible to continue to publish such books, and they are, therefore, published under the auspices of the Association by independent publishers.

Library

Demands for library service from members of the Association increased considerably during 1948. Approximately 2,500 package libraries were provided and about 250 requests were denied service because of nonmembership in the Association. The most popular requests for the year were for information on the new antibiotics, new drugs, anesthetics, alcoholism and undulant fever.

The periodical lending service continued to be as popular as it has for many years past. Approximately 10,000 journals were sent out on loan. The various Veterans Administration libraries throughout the country have continued to call on the library with increasing demands for its type of library service.

Requests for the establishment of exchanges from publications issued in foreign countries with publications of the American Medical Association decreased somewhat during the year.

Three volume indexes of THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION were prepared, as usual, in the library. Unfortunately, because of the printing situation, indexes for volumes 136 and 137 were not published in the final issues of those volumes for the first time in the history of the publication. A return to the usual schedule of publishing the index of THE JOURNAL in the final issue of volume 133, covering September-December, 1948, is anticipated.

Quarterly Cumulative Index Medicus

Despite every effort to resume publication of the QUARTERLY CUMULATIVE INDEX MEDICUS on schedule, the progress made in 1948 was disappointing. Volume 41 of the INDEX, covering January-June 1947, was distributed to subscribers about May 1, 1948. This volume represents the only one completed during the year. Volume 42, July-December, 1947, has been entirely put into type, but the completion of publication and distribution to subscribers cannot be hoped for until early in 1949.

Because of the tremendous demand for extra copies of the QUARTERLY CUMULATIVE INDEX MEDICUS now out of print, 300 additional copies were reproduced covering each of the volumes from 1 to 24. Most of these have already been sold, and maintenance of a stock of approximately 100 copies of each of the volumes of the QUARTERLY has been authorized.

World Medical Association

A complete report on the present status and activities of the World Medical Association was printed in the Organization Section of THE JOURNAL for Oct. 9, 1948. Since the members of the House of Delegates undoubtedly are familiar with the content of the report, it does not appear to be necessary to include it here. Copies of JOURNAL pages will be available at the interim session for the purposes of reference committees.

Consultants for General MacArthur

In 1947 General Douglas MacArthur requested, through government channels, the services of certain experts to aid him in revising and reestablishing Japanese social security laws including sickness insurance. The experts furnished were for the most part persons who were federal employees and ardent proponents of compulsory sickness insurance. The Board of

Trustees complained about this situation, and as a result General MacArthur requested that a group of representatives of the American Medical Association be sent to Japan on a consultant status.

Drs. E. L. Henderson, Ernest E. Irons, R. L. Sensenich, Edward J. McCormick and John H. Fitzgibbon were appointed consultants and visited Japan in the late summer. The report in full will be made to General MacArthur and, when released by him, will be given space in THE JOURNAL.

The Ewing Report

Under a release date of Sept. 2, 1948, the Ewing Report to the President on "The Nation's Health, A Ten Year Program" was given to the public. This report devotes considerable space to a plea for government medical care supported by a compulsory taxation system. The report appears to be purely politically inspired, and little space should be given to it here. While the medical profession as a whole may take this report for what it is worth, there are many lay persons who will be convinced of the merit of some of the recommendations. It is hoped that every physician will familiarize himself with the principal features so that he may be able to turn the searchlight of truth and understanding on it.

National Health Assembly

Early in the year the Federal Security Administrator, Hon. Oscar R. Ewing, at the suggestion of the President, called a large meeting of both lay and professional persons who were interested in health affairs. The Association was represented by the President, the President-Elect and the Secretary, the latter of whom served as a member of the Executive Committee of the Assembly. In the various sections and panels, officers and Fellows of the Association played important roles. An analysis of the registrants at the National Health Assembly, which was held May 1-4, shows that 33 persons representing the American Medical Association directly or indirectly were present. In addition there were 66 other physicians out of a total registration of approximately 350.

Matters Referred by House of Delegates

Resolution on Cancer Detection Centers: The Board of Trustees is cooperating with the American Cancer Society in accordance with the provisions of this resolution.

Resolutions on Federal Grants-In-Aid to States: Careful consideration has been given these resolutions by the Board of Trustees, and the Board will continue to scrutinize pending legislation which does not contain the principle that federal grants-in-aid should not be extended to any state which has not clearly demonstrated an absolute need for federal assistance.

Resolution on Compulsory Cash Sickness Compensation: This resolution expressed dissatisfaction that a study had not been conducted of the Rhode Island Cash Sickness Benefits Program as requested in a resolution presented to the House of Delegates in 1946. The 1946 resolution was brought to the attention of the Council on Medical Service early in 1947, and since that time the Council has followed carefully the developments in regard to this type of legislation throughout the United States. Reports were submitted to the House of Delegates in June 1947, January 1948 and June 1948, as follows:

June, 1947: Interest in and legislation concerning insurance against loss of wages during sickness indicate a need for a study of the subject. The Board of Trustees has referred the matter to the Council.

January, 1948: The Council continues to follow legislative developments in the various states and has made it a point to maintain a liaison with the Railroad Retirement Board in regard to cash sickness benefits. At the time of the June session the Council reported on the introduction of thirty-two "cash sickness" bills in the legislatures of thirteen states. Since then eleven bills have been added, making a total of some forty-three bills introduced in sixteen state legislatures. These bills generally provide for the establishment of a system of sickness benefits or "health insurance." The growth in interest in this type of legislation is shown by the fact that only ten bills were introduced in state legislatures in 1935-1936, as compared to thirty-nine in 1945 and forty-three in 1947.

June, 1948: The House of Delegates approved the principle of cash sickness benefits in 1938. Since that time interest in the subject, particularly on the part of state legislatures, has developed rapidly. Fifty proposals for cash sickness and related benefits were introduced in state legislatures in 1947. Of this number, twenty-five provided for specific cash state fund, with affiliation compulsory. The implications of this type of program warrant serious consideration. The House of Delegates recognized this when it approved a resolution requesting "a complete study of the existing and proposed compulsory temporary disability compensation programs." The resolution was referred to the Council on Medical Service, and since then the staff has followed closely the developments in various states. These developments were reported to the House in June 1947 and in January 1948.

The Council has postponed a detailed study until experience from more than one type of program can be obtained and compared. The Rhode Island (monopolistic) plan has been in operation over five years, the California (optional) plan over one year and the Railroad Retirement Board (national) plan almost a year. Studies of these three, together with a number of the proposed plans, should provide a reasonable appraisal of the subject. A study of the Rhode Island plan has recently been completed by Miss Elizabeth Wilson, and arrangements have been made to have access to the results of the study. Studies of the two other plans will be undertaken in cooperation with the Bureau of Medical Economic Research unless the Council discovers existing studies comparable to that of Miss Wilson. The Council is primarily interested in the medical aspects of cash sickness benefit programs and will make every effort to arrive at definite recommendations.

Resolutions on Paying Physicians Engaged in Examinations for the Armed Forces: These resolutions were transmitted in a letter to Mr. Lewis B. Hershey, Director of the Selective System, who replied as follows:

"This acknowledges your letter of Aug. 12, 1948, wherein you advise that the House of Delegates of the American Medical Association adopted the resolutions of the New Hampshire Medical Association concerning the payment of fees by the Selective Service System for examination of registrants.

"It is regretted that the House of Delegates of the American Medical Association should have taken such action. The backbone of the Selective Service System is its uncompensated personnel operating in the many communities of the nation. Representative citizens are asked to serve as members of local boards, members of appeal boards, government appeal agents, advisors to registrants, and medical advisors. These people operate as understanding neighbors and in the past have performed, without compensation, a work that is immeasurable. It is our desire to have local physicians participate in this work as medical advisors to the local boards. Of course, if the members of your association refuse to participate without fee, it will be necessary that the American Medical Association go to Congress to support an appropriation for fees, or else we will have to dispense with the services of those who refuse.

"Under the limited system now being organized with high physical standards by the armed forces, we do not expect to examine men at local board level except when a registrant claims to have an obvious defect or a manifest physical condition which would disqualify him for service. This, of course, will limit the amount of medical work necessary.

"I might add that it is not my opinion that the resolutions adopted by the American Medical Association represent the feeling of the doctors of this country. As we organize the new Selective Service System, many of our State Directors have long lists of doctors who have signified their desire and willingness to serve. It was gratifying to me that our representative at your meeting in Chicago reported that he recognized numerous lapel emblems which were issued to our former medical examiners by the Selective Service System. He identified himself to many of these doctors, and invariably he was told that they were ready and willing to serve again if the need arose."

Resolution on Policy of Federal Children's Bureau: This resolution directed the Board of Trustees to recommend that the policy of the Children's Bureau whereby only surgeons certified by the American Board of Orthopedic Surgery or eligible for such certification may be approved by a state agency for surgical service to children suffering from orthopedic conditions be liberalized so as to permit all qualified surgeons, whether or not certified by the American Board of Orthopedic Surgery, to be approved for such service. The following reply was received from Hon. Oscar R. Ewing, Federal Security Administrator, to whom the resolution was sent:

"I have discussed with staff of the Children's Bureau the resolution relating to desirable qualifications for surgeons participating in State crippled children's programs, adopted by the House of Delegates of the American Medical Association. It comes somewhat as a surprise to learn of this recommendation by the American Medical Association since we believed that the medical profession had always supported the efforts of the Children's Bureau and its advisory group of outstanding professional leaders over a long period of years, in the development of standards which would assure the highest quality of care for crippled children. It was our belief that the development of boards for approval of physicians who have demonstrated competence in special fields had been fully supported by the American Medical Association. The Children's Bureau advisory committees have on two occasions, 1936 and 1944, recommended that 'only surgeons who are certified by the American Board of Orthopedic Surgery, *or are eligible for such certification* should be approved by a state agency for surgical services for children suffering from orthopedic conditions.' In other words, they recommended that an orthopedic surgeon who had the training and experience required by such board, whether or not he is also a Fellow of the American College of Surgeons, be considered eligible for participation in the state crippled children's programs. There seem to be no other satisfactory criteria for determining competence in the special fields of medicine.

"The American College of Surgeons raised this same question with the Army, Navy, Veterans Administration, and the Children's Bureau, a year or so ago and was asked by all of the Government agencies to get together with the American Boards to avoid any duplication in approving specialists in surgery. The American College of Surgeons does not distinguish between general, plastic, orthopedic, neuro, and other specialties of surgery. Such distinctions seem essential for agencies employing surgeons or purchasing surgical care.

"Public agencies which have responsibility for administering a broad program of services for crippled children, have, in my mind, the duty to assure each child the highest quality of services available.

"It is not clear to me how such standards, as recommended by the advisory committee to the Children's Bureau, could constitute an arbitrary limitation on the right to practice medicine within the scope of state licenses and recognized professional qualifications, as indicated by the American Medical Association resolution.

"There is reference in the resolution to honoring of signatures on reports and prescriptions for prosthetic appliances. Crippled children are accepted by the state agencies for the provision of all services needed to restore the child to the maximum physical and mental health. When a child is found by the state agency to be in need of care because of a physical condition for which treatment can be made available under the program, the child is accepted for care and the state agency becomes responsible for the provision of medical services, hospital, convalescent home, or other institutional services, appliances and after-care as necessary for the treatment of the child. Appliances or other isolated parts of treatment are not purchased for a child by the state agency except as part of a comprehensive treatment plan for which the state agency is responsible.

"Officials of the Children's Bureau will be glad to join with you in studying any specific situations in which surgeons competent in orthopedic surgery are excluded from the crippled children's programs. In some states, of course, there are many more orthopedic surgeons than are required for providing the volume of service needed in the crippled children's programs."

Cooperative Medical Advertising Bureau

The Cooperative Medical Advertising Bureau continues to assist its present membership of 42 state medical associations through 34 state medical journals in securing advertising space sales and in servicing accounts by handling most of the details for the convenience of the journal offices.

Through its monthly bulletin, the Bureau offers helpful suggestions as well as current listings of products accepted by the Councils on Pharmacy and Chemistry, Physical Medicine and Foods and Nutrition. Acceptance of many products opens up an avenue of further prospects for the journals, all of which follow standards of advertising adopted for publications of the American Medical Association. It is, therefore, hoped to maintain present sales in subsequent years and even to increase them.

The net billing for the first nine months of the fiscal year, December 1947 through August 1948, amounts to $427,817.26. Because of economic conditions, there were some curtailments in advertising appropriations, and therefore this figure lacks $6,405.31 of the total amount for the same period of the previous year, or a decrease of less than 1.5 per cent. This is an average. Because of regional schedules, a few of the journals gained in revenue. Some enjoyed approximately the same revenue while the loss sustained by others exceed this percentage. The general trend of loss of other so-called "business papers" runs 6 per cent (in pages) for the period January through June 1948.

The trend for the remaining three months of this fiscal year indicates that the situation will not improve. However, the estimated total for the full year is $570,532, and the average decrease will not exceed 2.5 per cent. The estimated total gain for 1946, 1947 and 1948 will approximate $424,116, or an average gain of $141,372 per year.

The total net billing for the past three years will approximate $1,795,183.33, or an average of $598,394.44 per year since the reorganization of the Bureau. Previous billing from 1913 through 1945 totaled $4,909,356.23.

The Bureau, operating under the auspices of the Board of Trustees of the American Medical Association, functions in behalf of the state journal group, and all revenue is transmitted to the member journals, less the Bureau's operational costs which amount to about 6 per cent.

Office of Executive Assistant: Coordination and Public Relations

Substantial progress has been made in implementing the public relations program outlined in the report of the Office of the Executive Assistant which was submitted to the House of Delegates in June of this year.

The present report describes some of the newly launched activities that have won hearty approval from state and county medical societies and that have also received highly favorable comment from public relations journal and allied medical and health groups:

PR DOCTOR AND EXCHANGE

For a long time need existed for a specific medium through which public relations programs, ideas and achievements of state medical associations and the American Medical Association could be interchanged to the benefit of the entire medical profession. To fill this need, a periodical news letter and exchange, entitled the *PR Doctor*, was created. It is issued every two months at present, but expanding state medical association and county medical society programs may call for increased issuance.

The Secretary's Letter of Aug. 30, 1948, quoted some of the highly enthusiastic comments received from the profession after the first issue of the *PR Doctor* was mailed. Since that time there have been many additional commendations.

The *PR Doctor* is sent to the general officers of the Association, the members of the Board of Trustees, the members of the House of Delegates, the presidents, secretaries, journal editors, and public relations committee chairmen of state medical associations and a special list of leaders of key medical groups who have requested the news letter regularly. The headquarters

offices of state medical associations and of metropolitan county societies receive the *PR Doctor* news letter and, in addition, an accompanying kit of Exchange items described in the second half of the news letter. State associations in turn disseminate the PR information and ideas in this kit to their component county societies.

MEDICAL PUBLIC RELATIONS CONFERENCE

Reservations for the first National Medical Public Relations Conference, sponsored by the Office of the Executive Assistant, to be held in St. Louis on November 27, have exceeded original expectations. First invited were the chairmen of state medical association public relations committees, and executive secretaries and staff public relations directors of state associations. Since then the across-the-nation response has included reservations from presidents and other officers of state medical associations.

News about the Conference prompted such national organizations as the American Bar Association, American Dental Association, American Hospital Association, American Pharmaceutical Manufacturers Association and others to request special permission for their public relations leaders to attend. These requests have been granted.

Public Relations News, the outstanding weekly news letter of the profession, said, in commenting on the Conference, "Universality of PR techniques and their adaptability to all fields including the professions were never better illustrated than in the new program of the American Medical Association. The major project is preparation for the first Medical Public Relations Conference to be held in St. Louis November 27. Program will center around three basic topics: 'The Public Speaks on Health,' 'What Public Relations Did for Us,' and 'Yes, The Profession Needs Public Relations.'"

The theme of the Conference is "Shooting at Common Public Relations Targets." The need of such a definition and polarization of purposes was sharply emphasized by a survey of state medical association public relations objectives.

It is intended that the Conference become an annual event providing the public relations forum and personal get-together desired by public relations committee chairmen and staff of state medical associations.

PRESS RELATIONS

The gratifying response which the Press Relations Bureau has received from newspapers during 1948 indicates strongly that editors, reporters, feature writers, science writers and radio news commentators from every section of the country look to the headquarters office of the American Medical Association as a dependable source of information regarding medical matters. They have sought information and advice on every phase of the multiple activities of the Association and of the profession.

This Bureau, through its close contact with newspapers, magazines and radio stations, has succeeded in "killing" a great deal of inaccurate medical information. On many occasions inaccurate information regarding medical matters has been corrected in the process of publication, while in other cases such inaccurate information has been eliminated completely through the advice and services offered. Information favorable to the medical profession has often been added as a result of Press Relations activities.

Press Relations has worked closely with other Bureaus and Councils of the Association in matters pertaining to publicity, and its personnel has served as consultants on many occasions to medical groups seeking advice on publicity problems. For example, the officers and Council of the World Medical Association were assisted in handling publicity when 14 members of the Council, representing 12 different countries, held a four day meeting in New York, April 26-29, 1948. Much of the Council's business was carried in prominent stories in all of the New York newspapers and elsewhere.

Press Relations prepares and distributes the weekly news bulletin, *The American Medical Association News*, which contains official announcements of the Association and condensations of original articles and editorials appearing in THE JOURNAL, *Hygeia* and the special journals. This news release, containing material which may be reprinted or republished, is mailed to 1,300 newspapers, press association, magazines, radio stations, industrial house organs, medical journals and bulletins. Persons who receive this weekly news release have made specific voluntary requests for it.

The association's news releases have become a recognized medium for the dissemination of news pertaining to medical activities and medical progress. A casual perusal of a few magazines and newspapers indicates that there is a wide interest in articles on medical subjects.

The number of individual stories based on association news releases would run into the thousands. On the basis of clippings received in the headquarters offices, it might be said without exaggeration that American Medical Association stories have appeared in every daily and weekly newspaper in the United States during this year.

The association received splendid newspaper, news magazine and radio news coverage during the annual session held in Chicago in June. Sixty-three writers were registered for the session, including many of the nation's topflight science editors.

The Director of Press Relations has expanded his activities to include talks on "Fifty Years of Medical Progress," before a series of Kiwanis Club meetings in the Chicago area. His talks, which have been well received, outlined from a layman's point of view the many medical benefits which mankind has received during the last fifty years.

SECRETARY'S LETTER

The Secretary's Letter keeps officials of state and county medical societies informed about the activities of the American Medical Association and is mailed almost every week to more than 3,000 leaders in the medical profession. Its contribution to constituent state medical associations and component county medical societies is continually praised and commended. Many valuable inquiries and follow-ups are stimulated by its contents.

STAFF APPOINTMENT

The addition to the staff of Mr. William F. Doscher as assistant director of public relations has enabled the Office of the Executive Assistant to increase its services to the medical profession, has increased the amount of advice and guidance furnished to numerous state and county medical societies relative to setting up and operating medical public relations programs and has added to the number of special public relations events conducted by the Office.

FIELD SERVICE

Invitations to address and consult with state and metropolitan county medical societies on public relations matters are received from time to time during the year. Members of the staff participated in numerous conferences, discussions and meetings in 1948.

The Executive Assistant addressed medical society groups in Wisconsin, Minnesota, Nebraska, Washington and the New England states, and consulted with medical societies in California, Oregon, Oklahoma and Pennsylvania.

SPECIAL SERVICES TO COUNCILS, BUREAUS AND COMMITTEES

The services of the public relations office are available at all times to all Councils, Bureaus and Committees of the Association. Typical samples of events which were publicized and interpreted for the benefit of these groups and of the profession as a whole are:

1. *Spring Session of the Council on National Emergency Medical Service.*—A nationwide successful publicity campaign serviced 3,000 newspapers with a minimum of three different stories, teletyped and transmitted by Associated Press, United Press and International News Service; *Newsweek*, *Time* and the *Washington Report on the Medical Sciences* covered the session, and national broadcasts were made over the American Broadcasting Company's "Headline Edition" and the Mutual Broadcasting Company's "Mutual Newsreel."

2. *Civilian Amputee Program of Council on Industrial Health.*—The handless movie actor, Harold Russell, was invited to American Medical Association headquarters to pose for news and feature pictures to publicize the civilian amputee program of the Council. These, together with a story, appeared in the local press and were serviced nationally through Acme News-

pictures and the Newspaper Enterprise Association. Mr. Russell appeared on the American Medical Association television show, gave the Council's rehabilitation program a fine tribute and during his across-nation platform appearances will comment most favorably on the association's program.

3. *Bureau of Medical Economics.*—The public relations director of the National Safety Council was brought in, and his cooperation asked with reference to publicizing a new method of determining the leading causes of death. This new method, which was worked out by the Bureau, used the number of working years lost as a judging basis. Accidents were found to rank ahead of heart disease and cancer when this method was used.

4. *Delegations.*—Delegations from the World Medical Association and from Colombia were publicized through pictures taken by the American Medical Association public relations staff and supplied to newspapers.

MAGAZINE ARTICLES

The public relations department assisted directly and indirectly in helping create talked about articles favorable to the American Medical Association and to doctors in several nationally circulated magazines.

CORRESPONDENCE

The Public Relations office this year will answer nearly 3,000 letters dealing with medical public relations inquiries. This sizeable task involves requests from individual doctors, distinguished citizens, state and county medical societies, health agencies, the general public, students, business and industrial concerns and public relation organizations. The warm "thank you" letters received indicate that this service wins good will for the American Medical Association and the medical profession.

LIAISON WITH OPINION LEADERS

A continuing project has been started to cultivate and inform leaders in the various fields of public life, such as politics, education, government, law, the church, industry, labor, the press, radio, magazines, the armed forces, women's groups, motion pictures and the theatre.

The medical profession can never have too many friends among these varied American opinion leaders. For the most part, procedure is to meet and know these persons informally and to present the story of the achievement and public welfare goals of American medicine to them. Their stake in the continuance of a free medical profession is stressed; reception to date has been most encouraging and beneficial.

BUREAU OF INDUSTRIAL AND PERSONNEL RELATIONS

Since the presentation of the Bureau's last annual report to the House of Delegates in June 1948, the activities of the Bureau have expanded from the role indicated in the Functional Analysis of Personnel Program that was appended to that report.

In addition to previous duties, the Bureau has taken over the employment function. In accordance with employment requisitions furnished by Association departments needing personnel, the Bureau by various means, such as advertising and contacts with schools, residence halls and placement agencies, attempts to procure the personnel requested. Applicants for employment are screened by appropriate skill and aptitude tests and are referred to departments in accordance with requisitions on file. Obviously, the full benefits that are possible from the use of the tests in placement and utilization of the applicants can not be expected until such time as applicants substantially outnumber job openings. The tests so far, however, have screened out the incompetent, though the return of a more normal labor market must be awaited to exercise the selectivity that will be indicated by an adequate testing program.

To help ascertain the causes of labor turnover, the Bureau now conducts an exist interview with each employee leaving the Association's employ. An analysis of these interviews is expected to have practical as well as statisical advantages in planning future personnel policy. A report of labor turnover for the months of June, July and August 1948 shows that 159 applicants were interviewed, 65 tested and 118 hired. In the same period, 130 employees were separated from the payroll. The latter total, however, can be discounted by the fact of 32 separations in the Varitype Department, the operations of which were cut radically when the work stoppage in the composing room ended June 27, and of at least 25 separations due to part time summer employees returning to school.

The aforementioned employment activities have been superimposed on the activities that were set out in some detail in the previous annual report. Those activities may be summarized as follows:

1. Continuance by job evaluation studies and performance rating to act in an advisory capacity as to equitable salary adjustments for "ordinary" office personnel.

2. Preparation of an employee's manual, which should be ready for release by December 1.

3. Preparation of an organization manual for the Association to indicate functions of departments and flow of work therein.

4. The formation, with the help of an advisory committee of certain Association executives, of a vacation policy in keeping with existing personnel practice of what are believed to be progressive organizations.

5. Participation actively in the installation and supervision of the varitype operation that was used in the publication of THE JOURNAL during the work stoppage in the composing room.

6. Negotiations with seven unions whose contracts either have expired or are about to expire.

7. Improving and installing modern personnel records to conform to Association needs in visible index form, including (*a*) modern application form for employment, (*b*) authorization to Comptroller to pay, (*c*) listing of applications of all employees in alphabetic sequence and by departments with collateral cards indicating salary history, job classification, performance rating and (*d*) a listing by job classifications.

8. Devising and preparing periodic reports, such as a monthly employment log, turnover report, application register, exit interview analysis, monthly wage and salary administration control report and a quarterly chartual presentation of salary grades, number of persons therein and job averages in light of area averages.

9. Studies in modern personnel administration.

10. Consultation with employees concerning personal problems affecting job performance.

11. Processing of employee grievances.

As has been stated in the previous annual reports submitted by this Bureau, the personnel program of the Association will be subject to future evolution and development as future appraisals and experience indicate the practical needs of the Association.

Council on Pharmacy and Chemistry

Since the last report was made to the House of Delegates at the Chicago Session in June, the Council on Pharmacy and Chemistry has continued to pursue its objectives relating to the advancement of research and therapeutic measures and any other activities for which this body has become renowned.

RESEARCH

A number of grants-in-aid have been issued under the auspices of the Committee on Therapeutic Research, a standing committee of the Council. These grants are intended to assist research workers in the study of various therapeutic problems. The Council was responsible for considerable research on the part of those interested in the development and distribution of new drugs and technics by examining the proposals, asking searching questions and demanding factual information. In addition, many conferences have been held in the Council office with individual research workers, with representatives of research organizations and with representatives of organizations interested in industrial efforts. Furthermore, information intended to acquaint interested parties with the latest information and to point research investigations toward research objec-

tives that provoke sound scientific facts was disseminated from the Council office in Council reports and by members of the headquarters staff to medical and allied groups.

THERAPEUTIC TRIALS COMMITTEE

The Therapeutic Trials Committee, another standing committee of the Council, has pursued its work of encouraging research in fields in need of exploration and of assisting collaboration to reduce to a minimum unnecessary repetition of research efforts and to bring together those who have new ideas or products and those who are qualified to undertake the necessary investigations. An outstanding example of the Committee's efforts is the collaborative project that it has initiated for the study of the effect of estrogens and androgens on cancer. Participating in this project are fourteen pharmaceutic firms that have been donating drugs, forty-eight investigators and other interested organizations such as the American Registry of Pathology at the Army Institute of Pathology. A progress report of the Therapeutic Trials Committee has been prepared for presentation to the Council and will be published in THE JOURNAL in the near future.

PUBLICATIONS AND REPORTS

Council-sponsored publications, including "New and Nonofficial Remedies," "Useful Drugs," and the "Epitome of the Pharmacopeia of the United States and National Formulary," which have become standard reference books in medical and pharmacal schools, in hospitals and elsewhere continue to enjoy popularity, and thousands of these books have been distributed. Recently the "Annual Reprint of the Reports of the Council on Pharmacy and Chemistry" for 1947 was made available. In addition, there was released for distribution the "American Medical Association Interns' Manual," prepared by Councils and Bureaus of the American Medical Association and compiled and edited in the office of the Council on Pharmacy and Chemistry.

The Council also continues to pursue its policy of publishing various reports of interest concerning the prevention and treatment of disease and to make available reprints of these articles as requested by physicians and others with mutual interests.

"ACCEPTANCE" OF DRUGS

The acceptance program of the Council encourages the submission of many drugs, so that the manufacturers may use the Council seal. This represents one of the major activities of the Council and requires the maintenance of a well equipped laboratory at Association headquarters. Many outstanding authorities were consulted by the Council as the drugs were being considered. As the products were accepted, statements of actions, uses and dosage were prepared for publication in THE JOURNAL and eventual transferal to "New and Nonofficial Remedies."

MEETINGS

In addition to several committee and subcommittee meetings, the Council held its annual meeting on Nov. 12, 1948. The Therapeutic Trials Committee met on the preceding day. Details of these meetings will appear in an early issue of THE JOURNAL and will be abstracted in the 1949 annual report to the House of Delegates.

COLLABORATION

The Council and its office personnel continue to work closely with many agencies, governmental and nongovernmental. It has also worked closely with other departments at the headquarters offices where there were problems of mutual interest.

EXHIBITS

Exhibits prepared under the auspices of the Council have been popular and in demand by a number of societies and associations. Usually a representative of the Council office accompanies the exhibit to answer questions and to explain in detail the work of the Council and other Association offices.

FIELD SERVICE

Members of the headquarters staff continue to receive requests to appear before scientific and lay groups to discuss topics which fall within the purview of the Council. The Secretary and assistants at the Council office and members of the Council hold membership in a number of committees with varying interests, which permits active representation where indicated.

QUACKERY

The Council and the Bureau of Investigation have increased the tempo of their investigations of questionable practices, so that proper attention may be focused on frauds and charlatans and the chicanery which they promote. Articles on these activities have appeared from time to time and will continue to appear. In addition, where indicated, the facts are brought to the attention of the proper authorities.

TOXICOLOGIC PROBLEMS

Because of the harmful results that may follow the use of highly potent drugs and because of the accidents that have occurred with other preparations, the Council is expanding its interest in toxicologic problems so that proper warnings and other information will be available in time of need. An indication of this interest is seen in the joint enterprise undertaken by the Council on Pharmacy and Chemistry and the Council on Foods and Nutrition in the study of pesticides, a group of compounds which may present real hazards unless properly controlled.

LEGISLATION

The Council presents its information on therapeutics and allied measures and the benefit of its experience to those who are interested in health measures advocated by federal or state bodies. Such information usually is forthcoming on request from an interested individual or body, but often it stems from an action initiated at headquarters by another office, such as, for example, the Bureau of Legal Medicine and Legislation.

RECOMMENDATION FROM HOUSE OF DELEGATES

The report of the Reference Committee on reports of the Board of Trustees and Secretary, which was adopted by the House at the 1948 Annual Session, stated in part:

> The reports of the councils and laboratories indicate, as they have in the past, the abundance and excellence of their diversified accomplishments. The committee recommends that some method of furnishing information on the work of the councils and laboratories to the rank and file of the membership be studied. Your committee believes that information about the accomplishments of these departments of the Association gains for the Association improved understanding and cooperation from the membership.

Steps have been taken to implement this recommendation.

Chemical Laboratory

Since the first of the year the Chemical Laboratory has been mainly occupied in carrying out its primary function of examining drugs and pharmaceuticals and establishing tests and standards for several of the products submitted to the Council on Pharmacy and Chemistry. Some of these products were promethestrol, methionine, methapyrilene hydrochloride, thonzylamine hydrochloride and methaphenilene hydrochloride. Certain of these demanded rather extensive investigation. The question of appropriate names for several new drugs has been considered in cooperation with the Council's Committee on Nomenclature.

Considerable time has been spent editing the tests and standards section of the forthcoming N. N. R., and the Director has been active in arrangements for the scientific meetings at the Chicago Session. One of the staff organized and presented a scientific exhibit for the Laboratory depicting the relationship of chemical structure and pharmacologic action at the annual session. The staff has been active in developing plans for the proposed expansion of the Laboratory.

The Laboratory has continued its function in the consideration of products or devices submitted to other departments when chemical examination or advice was thought desirable. An example was the examination for the Bureau of Investigation of the Zerret-Applicator, a quack device. It has advised the editorial and advertising departments in chemical matters and has aided the Library in indexing certain chemical products for the Quarterly Cumulative Index Medicus.

Several books have been reviewed for publication in THE JOURNAL, and numerous letters of inquiry have been answered. A system of classification is being set up for the books maintained in the chemical library used by the Division of Therapy and Research.

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Council on Physical Medicine

The Council on Physical Medicine has continued actively its assigned duties of investigating apparatus, instruments and methods for therapy and diagnosis offered for sale to the medical profession. Thus, the Council aims to protect the physicians and the public against fraud, misrepresentation, inefficiency and objectionable advertising in connection with apparatus and physical methods recommended for medical purposes.

Since January 1948 approximately 118 pieces of apparatus have been submitted for consideration. Fifty-one reports of acceptance and three reports of nonacceptance were published in THE JOURNAL this year. Among the devices considered were whirlpool baths, diathermy, contraceptives, hearing aids, baby incubators, ultraviolet lamps, metabolism apparatus, oxygen tents, gynographs, electric impulse stimulators, inhalation pumps, radium applicators, colonic irrigators, pyrometers, sitz baths, electrosurgical units, germicidal lamps, resuscitators, audiometers, respirators, stethoscopes, appliances for relief of allergenic disturbances, infra-red lamps, vaporizers and elastic hose.

PUBLICATIONS

The booklet "Apparatus Accepted" is being revised, and it is expected that a new edition will be printed during the coming year. Six articles were published: Experimental Production of Cancer of the Skin by Ultraviolet Radiation, Tinted Lenses, Intermittent Positive Pressure Breathing, Microwave Radiations, Acceptance of Ultraviolet Lamps for Disinfecting Purposes (Present Status), and Resuscitation.

ATOMIC ENERGY

The Council has sponsored an exhibit on atomic energy at six medical meetings. It is scheduled for at least five additional meetings before the end of 1948. The two pamphlets "Glossary of Terms Used in Atomic Energy and Nuclear Physics" and "Primer of Questions and Answers Relating to Medical Applications of Atomic Energy" were printed this year and have been distributed widely since the Annual Session of the American Medical Association in June.

ARTIFICIAL RESPIRATION

The Council cooperated with the American National Red Cross in the publication of a joint article entitled "Resuscitation," which appeared in THE JOURNAL.

COUNCIL CONSULTANTS

Physical medicine embraces many branches of the healing art. In view of the wide scope, the Council is fortunate in having the expert advice of groups of consultants which have been appointed to advise the Council in specialized fields.

American Health Resorts.—A meeting was held in Chicago at the time of the Annual Session of the American Medical Association at which four members were present. A list of health resorts which are under medical direction are being compiled. Two papers are being prepared on the subject of health resorts. There will be a small exhibit on the subject at the Interim Session of the Association in St. Louis, November 30 to December 3.

Artificial Limbs.—A new group of consultants has been appointed. A meeting was held at the time of the Annual Session of the American Medical Association in Chicago in June. It was decided that the group would prepare two booklets, one for the surgeon and another, less expensive, for the patient.

Audiometers and Hearing Aids.—Thirty-two hearing aids were presented to the Council for consideration; two have been accepted and the remainder are still being investigated. Five audiometers have been submitted, but none of the reports on them is complete. The article "Rebates" has been adopted for publication.

Contraceptive Devices.—One meeting was held in Chicago in June at the time of the Annual Session. The revised "Requirements for Acceptance of Contraceptive Devices" have been adopted. Five devices were submitted for consideration, but the reports are not complete

Education.—At a recent meeting of this group, the Committee on Education of the American Congress on Physical Medicine requested closer cooperation with the Council through the consultants.

Electrocardiographs.—Six devices were submitted to the Council during the year. Two reports of acceptance were published in THE JOURNAL. One meeting was held in June, at which time revisions of the "Minimum Requirements for Acceptable Electrocardiographs" were discussed and made.

Electroencephalographs. — "Minimum Requirements for Acceptable Direct Reading Electroencephalographs" were adopted by the consultants and referred to the Council members for adoption. One meeting was held in Chicago in June. To date, no electroencephalographs have been submitted to the Council for consideration.

Ophthalmic Devises.—A new group of consultants has been appointed. A meeting is scheduled for October.

Respirators.—The Consultants have recommended to the Council the acceptance of two cuirass type respirators and recommended the rejection of one.

Roentgen Rays and Radium and the Medical Aspects of Atomic Energy.—This group had one meeting in Chicago in June. An article on "Radiation Hygiene" has been adopted by the consultants and by the Council for publication. The consultants have given careful consideration to radon ointments and radium applicators.

The year 1948 showed an increase in the work of the Council, apparently because of more interest in physical medicine by the profession and public. An extensive correspondence with manufacturers of equipment was necessary in an effort to clarify criticisms of the devices. Improvement in function, efficacy and reliability of apparatus in many instances was suggested by the Council.

The Council on Physical Medicine has continued its cooperation with governmental and private investigative agencies, as, for example, the Food and Drug Administration, Federal Trade Commission, Federal Communications Commission, National Bureau of Standards, national and city Better Business Bureaus, American Standards Association and the Underwriters' Laboratories.

Cordial cooperation has been maintained with the American National Red Cross, the Infantile Paralysis Foundation, the American Congress of Physical Medicine and the American Hearing Society.

Council on Foods and Nutrition

An important public health problem, created by the rapid introduction of a great number of new synthetic organic pesticides, was called to the attention of the profession in a statement adopted by the Council on Foods and Nutrition on June 26, 1948, and published in THE JOURNAL Aug. 28, 1948. These pesticides, developed for the most part since World War II, are now widely used in agriculture for the combating of insects and other pests. Their use creates potentially grave public health hazards, since toxic residues may find their way into foods. There is an appalling lack of factual data concerning the effect of these substances when ingested with food. The pathologic effects on man of the ingestion of small amounts of these substances over prolonged periods are entirely unknown. While recognizing the great potential usefulness of the pesticides in agriculture, the Council also recognizes the hazards of careless use.

The Council has had full support and help from the Council on Pharmacy and Chemistry in the study of this problem.

The recognition of the fact that foods and beverages are being increasingly exposed to possible contamination with the residues of chemical technologic aids used in their production may well be the beginning of a new era in the science of foods and nutrition as it concerns the physician. The profession has long recognized that foods must be free from bacterial contamination and that they must both contain and retain essential nutrients. The development of a multitude of new chemical technologic aids now makes it necessary to insist that foods be free from toxic residues.

To assist in keeping the profession informed of advances in the science of foods and nutrition as it relates to the health and

well-being of the people is the central purpose and reason for the Council's existence.

The "Handbook of Nutrition," a collection of selected papers by authorities in the field, is nearing completion.

The following data are illustrative of other recent activities of the Council.

Since cheese is an important article in the American diet and since it is recognized that cheese made from unpasteurized milk can and does account for certain epidemic diseases in man, the Council has indicated its intention to encourage the producers of cheese to take the necessary steps for the control of this source of infection.

Concerning the multiple vitamin fortification of the general milk supply, the Council endorsed the statement by the Food and Nutrition Board of the National Research Council (to be published). The Council issued a statement concerning the fortification of whole milk with vitamin A in which it was indicated that the Council could see no public health advantage to the supplementation of the normal vitamin A content of whole milk.

The Council has taken steps to encourage the production of fruit juices containing high natural levels of vitamin C. The fortification of fruit juices with ascorbic acid and thiamine has been proposed, but the Council has not accepted such juices.

One large group of manufacturers of ice cream has indicated its desire for Council support of a study of ways and means of improving the nutritive content of ice cream. The Council voted to encourage this project and plans to set up a committee for the consideration of the results of this investigation.

The status of the nitrogen trichloride treatment of flour ("agene" treatment) has been carefully followed.

The wider use of vitamin D through the extension of the use of vitamin D milk is in part due to the efforts of the Council. Currently the number of accepted brands of vitamin D milk exceeds 1,100.

The primary reason for the formation of the Council was to prevent or discourage false or misleading advertising claims in the promotion of foods. This is still one of the important functions of the Council. Annually, the Council reviews advertising copy worth several million dollars.

The services of the Council are given to many inquirers, among them physicians, laymen, manufacturers and governmental and private agencies.

The Council continues to have the cooperation of the food industry. For its cooperation and for the help of many interested groups, the Council is most appreciative.

Bureau of Investigation

For the period from Jan. 1, 1948 to Aug. 31, 1948, the Bureau of Investigation answered a total of 2,457 inquiries. This total was about evenly divided between members of the medical profession and other persons. The latter group included students and teachers, laymen, Better Business Bureaus, government agencies and newspapers and magazines.

The Bureau also contributed six columns of reports for inclusion in THE JOURNAL and collaborated with the Council on Pharmacy and Chemistry in a report exposing the promotion of a nostrum for bust development.

From the point of view of interest, the largest volume of correspondence was received because of the promotion of Dr. William F. Koch and his method of treatment for cancer by United States Senator William Langer of North Dakota. Senator Langer had caused a reprint from the Congressional Record for June 7, 1948, to be distributed, under his frank, to physicians throughout the country. A report covering one aspect of this promotion appeared in THE JOURNAL for Aug. 7, 1948.

The Director of the Bureau attended the trial in federal court at Fort Wayne, Ind., of the brothers Peter and Charles Kaadt of South Whitley, Ind., who had been dispensing vinegar and saltpeter and their own peculiar brand of hospitality instead of insulin and/or diet for diabetic patients. A report of this activity appeared in THE JOURNAL for May 22, 1948.

The Bureau is actively engaged in the gathering of information from the many sources available to it. It earnestly seeks the cooperation of all members of the profession, as well as of the state and local medical societies, in the gathering of this information. It is intended to publish a greater volume of reports by the Bureau on subjects attaining national interest.

Council on Industrial Health

The regular activities of the Council on Industrial Health have continued along the lines discussed at some length in the last report under the general headings of public relations, professional organization, education and scientific development, preparation of standards and rehabilitation. Major developments since June 1948 have occurred in the fields of workmen's compensation, emergency medical service and plans for the next Industrial Health Congress.

ANNUAL CONGRESS ON INDUSTRIAL HEALTH

The National Health Assembly held in Washington last spring contained no panel on industrial health. An effort was made to include it, although without enthusiasm. The Council now plans to conduct its next Annual Congress in a manner to make up for this omission. According to present plans essential problems will be stated and discussed in panels devoted to public relations, medical administration, environmental hygiene, medical-hospital services, health education and preventive medicine. These plans have met with approval by the other departments in the American Medical Association whose activities touch on employee health problems. The Division of Industrial Hygiene in the Public Health Service will act as a co-sponsor and other professional groups will be invited to participate. The House of Delegates has previously expressed its approval of joint planning for industrial health by management, labor and medicine. If the next Congress discovers useful ways of working together, a notable contribution to the advancement of industrial health and medicine will be made.

WORKMEN'S COMPENSATION

Several years ago the House of Delegates approved of participation by the Council on Industrial Health in a National Workmen's Compensation Conference under the aegis of the International Association of Industrial Accident Boards and Commissions. The International Association has withdrawn its support in favor of greater activity on the part of its own committee organization. The Committee on Workmen's Compensation of the Council has been so impressed by the useful contacts set up in this National Conference that steps have been taken to preserve them. Consultants are to be appointed representing the administrative, legal, insurance and technical aspects of workmen's compensation. The Directors of the Bureau of Legal Medicine and Legislation and the Bureau of Medical Economics Research have been invited to serve as members of the consulting committee. The work of the committee will embrace general surveys of medical relations in workmen's compensation, field visits to industrial commissions and insurance organizations, attendance at appropriate meetings, preparation of educational material, consultation services to state and other medical organizations, collection of data for special presentation to the profession and the necessary steps to improve treatment of compensable disability, disability evaluation and medical testimony. Dr. C. O. Sappington, whose experience and writings in industrial and compensation medicine are well known, has agreed to act as executive director of the Committee on Workmen's Compensation on a part time basis.

CIVIL DEFENSE AND INDUSTRY

Soon after the Council on National Emergency Medical Service was formed, its attention was called to the desirability of effective liaison with the Council on Industrial Health in order that conservation of industrial medical personnel through proper training, recruitment and distribution should occuppy a prominent place in joint deliberations. The purpose of this liaison is to make available all permissible information dealing with preparedness and national security to the industrial medical and allied professions and to profit by past experience. In the event of atomic bombing industrial physicians and allied technicians represent a group accustomed to measure and control toxic

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exposures. Industry will be the primary object of attack, and many changes will occur in the conduct of war plant operations and in the mobilization and use of the labor forces. There is need for intelligent preliminary planning to define the newer functions of industrial health as they relate to a national emergency, to integrate them with other measures designed for civil defense and to give industrial health a measure of authority in planning and administration in proportion to its responsibilities. These considerations have suggested that the Council on Industrial Health take the initiative in working out the details of industrial medical requirements under national emergency conditions.

The Council therefore has appointed a Committee to act as its consultants on the industrial medical aspects of civil defense. The membership is nearly identical to that of a committee serving in a similar advisory capacity to the Procurement and Assignment Service and the National Security Council during World War II. At its organization meeting the Committee determined that the principal problems had to do with the classification of the labor force according to physical capacity; the special health problems of women, the overaged and the handicapped; recruitment and training of industrial physicians, nurses and technicians; the training of industrial medical personnel regarding special missiles and new materials; the proper integration of industrial medicine with other elements in community civil defense planning, and the problem of nutrition in relation to fatigue and productive capacity. Subcommittees have these matters under consideration. A second meeting was held in Washington with representatives of the Armed Services, the National Security Resources Board, the Munitions Board, the Office of Civil Defense and the Brookings Institution. Material is in preparation which will alert the industrial medical profession with emergency and civil defense arrangements. Liaison is being organized with appropriate governmental agencies and with the engineering, chemical and nursing professions. The next meeting of the Consulting Committee will be held jointly with the Council on Industrial Health at Wright-Patterson Air Base in Dayton, Ohio, to permit inspection of and knowledge about the aviation and occupational medical services of the Air Force.

Council on National Emergency Medical Service

Council Activities

During the interval since the last report of the Council on National Emergency Medical Service the concept of its obligations to the profession has been further crystallized. Specifically, an educational program to alert the profession at large to the magnitude of the international dilemma with the accompanying medical implications is essential. To this end an increased number of editorial items, comments and the like have appeared in THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION. It is believed that emphasis in this direction has increased the understanding on the part of physicians of the problems now at hand.

A number of conferences and meetings of the Council have been held. As a result the American Medical Association continues to be identified among those groups that are urging on the President of the United States and the various agencies of the government, including congressional committees, the pressing necessity for continued development of policies, procedures and programs concerning the coordination and study of the numerous problems of a medical, health and sanitary nature involved in mobilization of the nation's manpower, resources and materials in the broadest terms and at the highest level.

FULL TIME SECRETARY APPOINTED

Dr. Harold R. Hennessy has been appointed to the newly created office of full time Secretary of the Council. He was formerly a member of the staff of the Council on Industrial Health. Dr. Hennessy, who received his M.D. degree from the University of Minnesota Medical School, practiced in California prior to 1940. During World War II he held several assignments in this country and overseas, the last being in the Office of the Surgeon, Fifteenth United States Army. At the present time he holds an Army Reserve Commission with the rank of colonel.

FOR THE YEAR AHEAD

The Council on National Emergency Medical Service, during the coming year, plans to utilize as fully as possible the numerous facilities of the American Medical Association to effect a timely, logical and orderly integration of the medical profession into the national security program.

Responsibility will be carried out through coordination in the constituent medical associations, with extension therefrom into the component medical societies. The Council, its consultants and the full time staff will be concerned with over-all policies and coordinations within and without the structural framework of the Association.

Thus, it is clear that for the year ahead the profession may anticipate aggressive national security medical programs implementing the principles as amended and adopted by the House of Delegates at the Chicago Session in June 1948.

The Council clearly recognizes that modern military activity depends basically on efficient and coordinated industrial production. It realizes that, if America is to keep her position of world leadership, every effort should and must be made to maintain the health and productive efficiency of her workers at a high level. Therefore, the medical personnel needs of industry, to insure the production of a sufficient number of planes, ships, tanks and guns are of prime interest to American medicine. In a similar way the personnel needs of agriculture and the civilian population at large must be weighed against the serious and pressing demands for physicians made by the armed forces. Planning and active coordinations along these lines are now in progress.

The effective number of available physicians in the United States is a valuable and relatively fixed human resource which cannot readily be increased. Therefore, this Council will continue to subscribe to the concept that strict economy in the use of professional personnel should and must be continued as one of the keystones in our nation's effort to secure the peace of the world.

The fine cooperation extended by individual physicians and concerned organizations has been most heartening, and the Council looks forward to the privilege of rendering increased constructive service to the profession, the armed forces, industry, agriculture and the public at large.

Bureau of Legal Medicine and Legislation

This report covers, in the main, only the period between the annual session of the House of Delegates held in Chicago in June and the date of its preparation, October 1.

REVISION OF STATE MEDICAL PRACTICE ACTS FOR AMERICAN MEDICAL DIRECTORY

In each edition of the "American Medical Directory" there are published the medical practice acts of the several states, which are kept up to date for the Directory by the Bureau. The last edition of the Directory was published in 1942. During the intervening period, there have been numerous amendments to state licensure laws and the Bureau has now completed a revision of these laws, as amended through the legislative year of 1948, for inclusion in the forthcoming Eighteenth Edition of the Directory.

THE EWING REPORT

On September 2, a report to the President by Oscar R. Ewing, Federal Security Administrator, was released, outlining a ten year national health program. It is understood that comments on the contents of this report will be submitted to the House of Delegates in some detail by other departments of the Association. The report suggests essentially the enactment of the compulsory medical care program under federal direction that has been proposed by the several editions of the Wagner-Murray-Dingell bill plus a gradual federalization, through subsidies, of medical education, of dental education, of nursing

education, of hospital maintenance and operation, of persons functioning in the field of public health, of research workers and of other personnel and facilities considered by Mr. Ewing to be necessary to make effective the program outlined in his report.

Copies of this report have been sent by the Bureau to each state medical association.

FOOD, DRUG AND COSMETIC LAWS

A recent important development should be reported briefly. There has been created in the American Bar Association's Section on Administrative Law a Committee on Food, Drug and Cosmetic Law. The creation of this committee followed the establishment in 1945 by the New York State Bar Association of a Section dealing with the same subject.

The American Bar Association committee, which held its first meeting in Seattle on September 6 of this year, will give continued study to both federal and state laws controlling the marketing of food, drugs and cosmetics and will from time to time suggest such amendatory legislation as the committee may deem to be needed.

The Chairman of the Committee, Charles Wesley Dunn, Esq., New York City, who occupies a similar position on the comparable Section of the New York State Bar Association, suggested in his first presentation to the Committee a number of amendments which will be given further study by the Committee.

The Director of the Bureau has accepted an invitation to become a charter member of the Committee.

NATIONAL MEDICOLEGAL ASSOCIATION

Reference was made in the report of the Bureau submitted to the House of Delegates last June to the fact that consideration was being given to the organization of a national association to promote a better development of legal medicine in the United States and to the publication of a periodical devoted to that subject. A meeting has been called of a steering committee to be held in New York City, October 18 and 19, where further consideration will be given to these proposals. The Chairman of the Association's Committee to Survey the Relationship of Medicine and Law, Dr. Alan R. Moritz, and the Director of the Bureau have accepted membership on the steering committee and will attend the New York meeting. The Director of the Bureau will also represent the American Bar Association at this meeting. Preparatory to the meeting, the Bureau has communicated with each state medical association to obtain reactions to the proposals and to date the response has been very gratifying and helpful.

SCOPE OF OSTEOPATHY

Court decisions by the supreme courts of three states have within recent months determined the scope within which osteopaths may legally function. A Pennsylvania case [1] involved the right of an osteopath to issue certificates of commitment to state institutions under the mental health act. The court held that an osteopath has no such right because he is not a "qualified physician" licensed to practice medicine in the state within the meaning of the mental health act. In a North Carolina case [2] the Supreme Court declared that osteopaths could not use drugs and that the phraseology used in the act under which they are licensed, authorizing them to practice "as taught by the various colleges of osteopathy recognized by the North Carolina Osteopathic Society" did not confer on them any right other than to practice osteopathy. The court said that the osteopathic colleges could not change the law of North Carolina nor widen the scope of the osteopath's certificate so as to permit him to practice other systems of healing by the simple expedient of varying their curricula. An Arizona case,[3] decided in 1947 but recently abstracted in THE JOURNAL, involved the right of an osteopath to practice optometry. The Supreme Court of the State held that the osteopath was legally entitled to practice optometry.

1. Palmer v. O'Hara, Secretary of Welfare, et al., 58 A (2d) 574; abstracted, J. A. M. A. **137**: 1553 (Aug. 21) 1948.
2. State v. Baker, 48 S.E. (2d) 61; an abstract will appear in an early issue of THE JOURNAL.
3. Gates v. Kilcrease, 188 P. (2d) 247; abstracted, J. A. M. A. **137**: 1679 (July 17) 1948.

In THE JOURNAL for April 10, 1948, there appeared an editorial referring to a then pending case in Kansas brought by a number of osteopaths before a three judge federal court against the governor and the attorney general seeking to restrain them from enforcing the section of the osteopathic act dealing with the scope of practice, as construed by the State Supreme Court, on the ground that that section, as construed, was discriminatory and violative of their rights under the Constitution of the United States. The decision of the Supreme Court of Kansas involved in this case held that a license to practice osteopathy authorized the practice of manipulative surgery and did not authorize the prescribing or administration of drugs as remedial aids. Testimony has been taken in this case, and briefs have been filed on behalf of both the plaintiffs and the defendants. The matter is now before the three judge federal court, and a decision is expected shortly. An appeal lies direct to the U. S. Supreme Court from the decision of the three judge court, whatever that decision may be.

STATE LEGISLATION

A summary survey of legislation of interest to physicians, enacted between July 1, 1947 and June 30, 1948, has been completed and will be published in a forthcoming issue of THE JOURNAL. It would unduly prolong this report if an extended reference were made to the state laws summarized in this survey, but it may be of interest to refer to some of the more important laws enacted.

A law was enacted in Virginia requiring a permit from the State Corporation Commission before any agency may solicit funds in the state for medical care programs. To assist the Commission in reviewing applications for permits, an advisory board has been created composed of seven members, one of whom is a representative of the Medical Society of Virginia. This law stems from a resolution adopted by the legislature in 1946 creating a commission to make a study of the activities of private groups seeking funds from the public for various phases of medical care. The State Division of Statutory Research and Drafting was assigned the responsibility of collecting for the Commission basic information and that Commission sought the assistance of the Bureau.

A law was enacted in Kentucky providing from the certification as "certified psychologists" of persons qualifying before a board of examiners in psychology. Similar laws had previously been enacted in Connecticut and in Virginia.

Laws providing for the licensure of practical nurses were enacted in Louisiana, New York and Rhode Island. Nursing scholarships were created in Mississippi and Virginia.

A law was enacted in South Carolina placing on a prescription basis the sale of the sulfonamide drugs, aminopyrine, thyroid and any other drugs declared to be "dangerous drugs." A similar law was enacted in Massachusetts with respect to amphetamine, barbituric acid and any other drug deemed by the department of public health to be a "harmful drug."

Laws providing for the licensure of hospitals were enacted in Massachusetts, Mississippi and Wyoming. Enabling acts under which prepayment medical service plans may be organized were passed in Mississippi and in South Carolina.

In Massachusetts, a special commission was created to consider the advisability of licensing institutions engaging in animal experimentation and to consider the advisability of supplying such institutions with unclaimed animals held in public pounds.

A New York law provides for the establishment of a state university and the creation of two health and medical centers as a part of it. Another New York law authorizes state aid to medical schools, research centers and similar institutions carrying on special training or research programs pursuant to contracts with the state university.

In South Carolina, eight scholarships were established at the state medical college, valued at $75 a month plus tuition, and conditioned on the recipient's promising to engage in private practice for one calendar year for each year of the scholarship in some rural community in the state designated by the state board of health.

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Arizona and Louisiana enacted hospital survey and construction acts and New Jersey created a commission to survey the state's voluntary charitable hospitals. In South Carolina, a law was enacted directing the state board of naturopathic examiners to undertake an immediate study of the licenses previously issued by that board.

In Virginia a senate joint resolution was enacted creating a commission to study medical education in general. In the words of the joint resolution, "the commission shall consider the costs and needs of medical education and the relationship of medical education to the services that it renders and the needs of the people, particularly in rural areas." The commission is to report to the legislature not later than Sept. 1, 1949.

AN EXAMPLE OF COOPERATION

The Executive Secretary of the Medical Society of the State of North Carolina, Mr. James T. Barnes, on his own initiative recently had sent to the Bureau a complete set of briefs filed in cases pending before the Supreme Court of that state involving the question of fees allowable to physicians who treat workmen's compensation cases. It has been previously reported that the Bureau maintains a Brief Library pertaining to numerous medicolegal issues. The more comprehensive this Library becomes, the better the Bureau will be able to serve. Other state medical associations are urged to keep the Bureau in mind if important court decisions arise in their states involving medicolegal issues.

INCOME TAX DISCRIMINATIONS AGAINST THE PROFESSIONS

Reference was made in the report of the Bureau submitted last June to several tax proposals then being made to remove some of the inequities in the federal income tax laws as they relate to professional persons.

These proposals in effect would permit individual proprietors and partners to provide from earned income for their retirement, the sums expended being excluded from taxation during the year expended but taxable during the period when the benefits of the retirement plan are received. Stated differently, the incidence of the tax on this income would be shifted from the year of earning to what is in most cases the year of spending. The House of Delegates instructed the Bureau to keep in close touch with this development. This it has done.

These proposals were considered by two sections of the American Bar Association at its 1948 meeting in Seattle, the Section on Corporation, Banking and Mercantile law and the Section on Taxes. The two sections failed to agree on a mutually satisfactory proposal to attain the objective and consequently the matter was not given consideration by the House of Delegates of the American Bar Association. It is anticipated that additional consideration will be given this matter at the midwinter meeting of the House of Delegates of that association.

In the meantime two programs have been scheduled in Chicago to discuss these tax proposals, one by the Committee on Federal Taxation of the Chicago Bar Association to be held on October 27 and the other by joint committees of the Chicago Medical Society, the Institute of Medicine of Chicago and the Chicago Bar Association on November 16. The director of the Bureau of Medical Economic Research, Dr. Frank G. Dickinson, will participate in the latter program.

The Bureau has secured material explanatory of these proposals for distribution to state medical associations so that the principles embodied may be studied prior to the convening of the Eighty-First Congress.

It is not recommended that the House of Delegates take any further action in connection with this matter at the present time.

IN BRIEF

A member of the staff of the Bureau, Mr. George E. Hall, has recently accepted membership on the Executive Committee of the Committee on Tests for Intoxication of the National Safety Council. During the summer, Bureau memoranda have been prepared or revised dealing with Blood Grouping Tests in Disputed Paternity Cases, Injunction and Quo Warranto to Restrain the Unlawful Practice of Medicine, Scope of Osteopathy, and Malpractice Actions for Death or Injury Following Administration of Anesthetics. A memorandum nears completion which will contain reference to the laws that have been enacted restricting the use of the title "Doctor" by requiring that in connection with its use there appear some descriptive phraseology indicating the type of practice the licentiate is authorized to pursue. Arrangements are under way for a program on the relationship of physicians to the law to be presented at the Atlantic City session in 1949. . . . A reference is made in the report of the Secretary of the Association to a study under way by the Bureau concerning the corporate practice of medicine. This study is under the immediate supervision of Mr. Edwin J. Holman, a member of the Bureau staff. . . . The Director of the Bureau has been designated as a consultant to the Committee on Workmen's Compensation of the Council on Industrial Health. A communication has been received from the Professor of Medical Jurisprudence at Osmania University, who is also doing medicolegal work as coroner of the Hyderabad State, India, requesting information as to the sources in the United States from which he may obtain information concerning the application of science to criminal investigation. This information was furnished to the physician by the Bureau. A very important investigation has been concluded in New York concerning the scientific basis for the chiropractic concept of the causes of disease and the chiropractic technic used to effect a cure. This study was made by a commission appointed by the Subcommittee on Cults of the Council Committee on Legislation, Medical Society of the State of New York, and the commission was composed of the Professor of Anatomy, Syracuse University College of Medicine, the Pathologist at White Plains Hospital, White Plains, New York and the Professor of Biophysics, Cornell University.

Bureau of Health Education

In order to conform with the change in Association policy whereby reports are now presented to the Interim Session of the House of Delegates rather than the Annual Session, this report on the work of the Bureau of Health Education covers the period from Jan. 1 through Aug. 31, 1948.

One new position has been created in the Bureau in the hope of coordinating speaking trips by American Medical Association representatives from all departments, so that the Association would receive the greatest possible value from all traveling staff members. The original optimism about arranging numerous other speaking engagements in connection with trips already projected has not been found justified. For the most part, the schedules of traveling speakers from other departments are well filled, and it is seldom that it is possible to add any engagements to itineraries. However, 67 extra engagements which would not otherwise have been made have been arranged, accepted and filled.

QUESTIONS AND ANSWERS

Individual letters received and answered in the department concerned with medical inquiries from laymen totaled 6,551. The exact total of questions is considerably larger, since many letters contained as many as 4 or 5 questions. The total represents an appreciable increase over figures for the corresponding period in 1947, during which 5,788 replies were prepared. On a calendar year basis, the difference probably would be still greater, since the decided decrease in inquiries during the summer months weighs heavily in the present report.

The subject of medical practice stimulated the greatest number of individual questions, the total being 364. Breakdown of this showed 87 questions regarding the American Medical Association and its services, 71 queries about how to select a physician, 44 on medical history and 102 questions of a general nature. Replies to inquiries about selecting a physician included routine referral to the local medical society for more exact information.

Next on the list were inquiries regarding drugs, 311. The popularity of the newly developed antibiotics is reflected in the fact that there were 102 questions about penicillin and strepto-

mycin. Only 19 queries were received on the subject of sulfonamide drugs. There were 136 inquiries of a general nature.

Health education was third in the list, with 236 questions. Thirty-three of these related to health education in primary schools and 23 in high schools. There were 37 inquiries about how to become a medical student. Of the total, 108 questions were of a general nature.

Following in order were questions on eyes, 154, child care and training, 128, cancer, 117, and allergy and asthma, 105.

This department also replied to 128 inquiries referred from the Cleveland Health Museum, 129 from the Tennessee State Medical Association and 131 queries from various museum sources, such as the Dallas and Newark Health Museums.

BUREAU PUBLICATIONS

The Bureau reviewed 25 books for THE JOURNAL and 14 for HYGEIA, and prepared 19 other contributions to THE JOURNAL, such as editorials, radio announcements, articles and news items. It also prepared 70 contributions for HYGEIA, including manuscripts, questions and answers, items for "Mothers' Column," and "Teachers' Helps."

The Bureau originated 21 articles published in periodicals other than those of the American Medical Association, and furnished advice and consultation on manuscripts to 5 organizations.

Fifteen new pamphlets were added between Jan. 1 and Aug. 31, 1948, to the Bureau's list of publications, 6 were revised in text and 20 were discontinued. Distribution of Bureau publications through the order department during this same period was 229,254; 67,900 reprints were sold direct to quantity purchasers, making a total of 297,154.

The practice of evaluating a pamphlet when it is nearly out of stock, then either discontinuing it and replacing it with fresh material on the subject or revising and reordering it, is leading steadily to a completely up-to-date file. But since expense must be considered, the evolution must of necessity be a gradual process.

Perhaps the most gratifying surprise in this period was the success of the 1948 American Medical Association lay publications catalog, designed and processed this year, for the first time, by the Bureau of Health Education. Within the last seven months since its publication, over 28,000 copies have been distributed and, judging from the trend, at least 40,000 will have been sent out before the end of the year. This distribution is in contrast to that of the last catalog, published in 1946, which had a total distribution of 29,830 copies over a period of two years. The 1949 catalog is also being prepared and processed by this Bureau.

RADIO

The year 1948 marked a recession from the preceding year of exceptional activity.

Network Programs.—Although authorized for sale to suitable sponsors, the network programs remained unsponsored. The restrictions placed on sponsorship by Association policy are such that it is not easy to find a sponsor meeting the requirements who has sufficient financial resources to undertake a broadcasting venture of the magnitude involved in commercial network radio and whose business is sufficiently related to medicine to make an American Medical Association program a profitable venture. Efforts to sell the programs are continuing through the Marshall-Hester Productions, New York, and the Network Sales Division of the National Broadcasting Company, Chicago.

The 1948 NBC series was entitled "Doctors Today."

Great changes in approach and technic have been developing in radio, with a strong tendency toward the so-called documentary approach whereby the actual voices of persons who are doing certain work or having certain experiences are brought to the microphone, telling their story in their own words, often on tape recordings. Many such programs are on the air. All the networks except NBC now permit recorded voices for the documentary features of their programs. Every effort is being exerted to bring about a change in NBC policy, whereby the Association can use recordings on its broadcasts over this network. Recordings are permitted on commercial news programs, but the same privilege is denied to broadcasters of educational programs. A number of conferences with radio critics at Columbus led to the conclusion that changes would have to be made in American Medical Association radio technics in order not to be left behind in the march of progress.

The Bureau of Health Education was the pioneer in popularizing the dramatization of radio health programs. Now the dramatic technic has been taken up in many quarters. The medical societies in Michigan, Wisconsin, Colorado, Jackson County, Mo., and others are making their own local transcriptions, many of which surpass in quality those made by the Bureau of Health Education.

On the other hand, an evaluation of the network program by the Schwerin Research Corporation through listening audiences is highly favorable. This report shows that 88 per cent of listeners responded favorably, 6 per cent unfavorably and 6 per cent indifferently. Few programs receive higher than 75 per cent favorable response, which makes the percentage of 88 very high, particularly in view of the basically educational character and purpose of the program. Curiously enough, the high point of interest was not in the dramatic episodes but at the times when physicians were giving straightforward information.

The format of the 1949 programs for which planning was begun in 1948 is being changed in order to keep pace with trends in the radio field.

Transcriptions: Seven electrical transcription series were made or remade during the year.

Transcription series now available are: three dramatizations, five musical programs and six interviews.

A special program using the Bureau's electrical transcriptions was carried out by the Tennessee State Medical Association.

Special Broadcasts: The special broadcasts included two sessions of the American Medical Association, the Interim Session at Cleveland in January and the Annual Session at Chicago in June.

A new technic was introduced in these broadcasts, and, instead of talks and interviews prepared in advance, a great deal of material was picked up in the Scientific Exhibit and at the meetings of the House of Delegates for use in network broadcasts and transcriptions. This was done with tape recorder.

Six radio programs were broadcast by staff members in local areas where they attended meetings.

TELEVISION

Through the continued helpful cooperation of television Station WBKB, the Bureau of Health Education presented 38 programs during the period from January 1 to August 31. That these presentations, introduced each week as "American Medical Association" programs, are reaching a considerable segment of the general population in Chicago and nearby sections is indicated by the fact that there are now 30,000 television receiving sets in the area. The station program, carried in Chicago newspapers, also lists the American Medical Association as a participant. Extreme care is exercised to present topics that will have adequate attraction for the general public; at the same time the material is kept on a high ethical level. On many occasions, representatives of various Councils or Bureaus at Association headquarters have cooperated in presentation of special features. Among these have been the Therapeutic Trials Committee of the Council on Pharmacy and Chemistry, the Council on Physical Medicine, the Council on Industrial Health, Bureau of Medical Economic Research, and Committee on Medical Motion Pictures.

Much helpful assistance has been provided by the Bureau of Exhibits in suggesting subjects for presentation and providing photographs, charts, equipment and models for demonstrations. Special programs presented during the period included an interview of Dr. Archer C. Sudan, first physician to receive the American Medical Association General Practitioner Award, an interview of Dr. Isaac Abt, on the occasion of his being awarded the Distinguished Service Medal of the Association, and five programs drawn from the scientific sections at the Chicago Session.

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Helpful relationships have been established with numerous health agencies, including the Chicago Health Department, the Cook County Health Department, the local branch of the American Cancer Society, local offices of the National Tuberculosis Association and the public relations department of the Illinois State Medical Association. There is being developed a plan to present several programs dealing with projects sponsored by the Woman's Auxiliary of the Chicago Medical Society.

Although many technical details still remain to be mastered, it is apparent that television offers a valuable contact with the general public in the field of health education, and also is a means of promoting understanding of and sympathy with the aims of the American Medical Association.

"Newscasts" have been based on reports in THE JOURNAL or articles in HYGEIA.

There has been a steady, though not large, demand for the "Television Handbook," issued by the Bureau in 1947.

LOAN COLLECTIONS

Fifty-one loan collections of HYGEIA articles representing 24 different titles were sent out by the Bureau. Collections most in demand were those dealing with outstanding medical advances, cancer, heart disease and first aid. This selectivity followed closely the preferences of borrowers in the preceding year.

A greater total of physician requests than that for the entire year in 1947 was received, which gives added emphasis to the apparent fact that local civic organizations are turning more and more to physicians for discussions of health subjects before lay audiences.

HEALTH AND FITNESS

The two consultants in the Division of Health and Fitness accepted 79 invitations to address groups or take part in conferences or workshops in 23 states during the past eight months. Eight trips were made to consult with school or college authorities in regard to the development and expansion of health programs in such institutions.

The work of the consultants is being more and more concentrated in the field of school health service and school health education. The Conference on the Cooperation of the Physician in the School Health and Physical Education Program, October 1947, apparently stimulated considerable interest in the field of school health on the part of state medical associations and state health and education departments. As a consequence, school health problems were given consideration in a number of state medical association meetings this past year.

The publication of the report of the October 1947 Conference, "Physician and Schools," and the pamphlet "Health Appraisal of School Children," edited by the consultants, Dr. D. F. Smiley and Dr. Fred V. Hein, and published for the Joint Committee on Health Problems in Education, has met with an enthusiastic reception. These two brochures have been widely distributed in every state to physicians, school administrators, teachers and public health workers. Along with the pamphlet, "Suggested School Health Policies," these two publications make a fairly complete summary of principles for school health service which is apparently filling a very real need. Copies of each were also sent to the professors of preventive medicine in all the medical schools and to all the schools of public health.

The consultants have particularly worked with the states of Tennessee, Wisconsin, New Jersey, Arkansas and Illinois in improving their school health programs. Particular mention should be made of the Woman's Auxiliary of the Medical Society of New Jersey, which has furnished the leadership in organizing health councils in all the counties of the state and laying before those councils, the project of a four point school health program recommended by the State Department of Education and the State Department of Health.

The consultants have given assistance to the Joint Committee on Health Problems in Education in developing policies with regard to height-weight records for children, formulas for the allocation of tax moneys to schools, interscholastic boxing, administration of school health service programs, fluorescent lighting in schools and the use of germicidal lamps in schools.

Plans are being made for a second Conference on the Physician's Relationship to the School. It is planned that this conference will again be held at Highland Park, Ill., in the fall of 1949. It is expected that the meetings will be devoted to consideration of the private practitioner's relationship to the school health program, the part time school physician, the full time school physician and the part time public health physician in the school program.

The consultants are continuing to prepare a series of "Suggested Discussion Topics for Teacher Aids" to accompany each issue of HYGEIA. These materials continue to be widely utilized in connection with the use of HYGEIA, The Health Magazine, as a resource aid for health education in secondary schools. The consultants are called on to review a considerable number of films and other audiovisual aids for use in school health and physical education instruction.

The Association's Committee on Health and Physical Fitness, of which the consultants of this Division are members, held a meeting in conjunction with the annual session of the Association in Chicago.

The exhibit, "Examining the School Child," at the 1948 Annual Session of the Association attracted more attention among attending physicians than did the exhibit of the year before.

The Division lost the valued services of Dr. Jean F. Smiley on Sept. 1, 1948. Dr. Smiley has accepted an important post with the Association of American Medical Colleges.

MEETINGS AND CONFERENCES

The Bureau staff traveled 97,666 miles to attend meetings or addressed 130 audiences in 27 states. They participated in 71 conferences and committee meetings. It was necessary to decline 21 engagements because of previous commitments or travel difficulties.

COOPERATIVE RELATIONSHIPS

Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association.—The 1948 meeting of the Joint Committee was held March 22 to 24 in the offices of the National Education Association, Washington, D. C. The Committee reelected Dr. Bernice Moss, Chairman, Dr. George Lyon, Vice Chairman and Dr. D. F. Smiley, Secretary, for another one year term.

Among the principal items dealt with by the Committee were: adoption of a resolution recommending in substance that state and local governmental units allocate funds on a basis which will not penalize school districts for absence of children due to illness; adoption of a resolution recommending in substance that schools should not sponsor or conduct interscholastic boxing contests because of the extreme health hazards involved; adoption of a resolution stating in general that where there is mutual understanding and cooperation between departments of education and health, with the resultant pooling of the resources of both departments, good school health service programs have been developed under school administration, health department responsibility or through joint jurisdiction and that in the light of this experience there is no single pattern that can be recommended at the present time for all situations at either the state or local level; agreement that on the basis of present research the old standard of refraining from swimming for one hour after a heavy meal, particularly on the part of unskilled persons, should still be observed, and adoption of a resolution urging that licensed medical schools, research institutions, hospitals and laboratories be supported in their animal experimentation programs in view of the great progress which has resulted and is continuing to be made in the fight against disease through animal experimentation.

U. S. Children's Bureau Advisory Committee on Maternal and Child Health Service: The Director of the Bureau was reappointed to membership on the Advisory Committee together with Dr. James R. Miller, Trustee of the Association.

American Public Health Association Committee on Professional Education.—This is one of the most important committees on which the Director of the Bureau is a member, since it is working toward objectives fully endorsed by the

medical profession, namely, improvement of the public health by improving the qualifications and training of public health personnel. The committee meets about twice a year, including one meeting at the time of the A.P.H.A. annual convention. This committee has prepared reports on the qualifications of health officers, bureau chiefs, sanitarians and health educators and is working on other reports. It supervises the accreditation of schools of public health for giving the master's and doctor's degree in public health and directs the activities of the A.P.H.A. Merit System Unit and Placement Bureau. The Director has served two terms, the last of which expired early in 1948. Association policy ordinarily calls for retirement after two successive terms, but this policy was waived and the Director has been reappointed for a term expiring in 1950. A meeting was held in New York, March 22, 1948.

A. P. H. A. Sub-Committee on Accident Prevention.—This sub-committee is allocated to the Committee on Administrative Practice and is under the chairmanship of Dr. Donald Armstrong. The committee has furthered accident studies and considered publication of materials in the field of accident prevention.

A. P. H. A. Sub-Committee (Illinois) for Estimate of Needed Health Educators.—The Associate Director of the Bureau serves on this sub-committee on planning for health education.

A. P. H. A. Section on Health Education.—The Director was appointed to the Nominating Committee for this section.

American Cancer Society Educational Committee.—This committee meets every month, usually in New York, and usually starts its meeting at 4:30 p. m. and continues it into the evening. For this reason it becomes necessary to spend two full days in New York at times when the use of planes is impossible. The Director has therefore been unable to attend many of these meetings. This committee is concerned primarily with professional education and has shown very little interest in lay health education, except for money-raising campaigns for the Cancer Society.

The Director of the Bureau also serves on the following committees:

Committee on Education and Public Information for the Home Safety Conference, National Safety Council
Executive Committee, National Society for Medical Research
National Committee for Traffic Safety
Advisory Board on Health Services, American National Red Cross
American Medical Association Committee to Confer with National Safety Council
American Medical Association Advertising Committee
The President's Highway Safety Conference, Committee on Organized Public Support
Special Consultant in Health Education, American Medical Association Woman's Auxiliary
Prentiss Award Committee
Committee on Public Education, U. S. Office of Civil Defense
Consultant in Radiological Defense, U. S. Office of Civil Defense

United States Government Agencies.—The Bureau continues to cooperate, largely by correspondence, with government agencies. Materials or information have been furnished during 1948 to numerous departments of the Federal Security Agency and to the Department of Agriculture, the Department of the Interior, the Department of State, the Army, the Navy, the Veterans' Administration, the Institute of Inter-American Affairs and the Office of the Secretary of Defense.

MISCELLANEOUS

The Bureau continued to compile information about attacks on and defense of medical research and to distribute it in response to requests.

The Bureau furnishes questions and answers to HYGEIA for publication and checks all galley and page proofs for medical accuracy.

The Bureau continues its cooperation with the Woman's Auxiliary.

As usual, the Bureau has enjoyed the cooperation of physicians outside the headquarters offices. Special thanks are due those who cooperated in radio, television and transcription programs and the consultants who have furnished answers to questions and have helped with advice and consultation. The Bureau appreciates the cooperation of other departments in the Association.

Bureau of Medical Economic Research

This report covers the activities of the Bureau of Medical Economic Research for the period from Jan. 1, 1948 to Oct. 1, 1948. During these nine months the Bureau has published five items:

"The Selling Price of a Medical Practice," which appeared in THE JOURNAL Jan. 31, 1948, was prepared because of numerous inquiries about the procedure to be followed when a retiring physician wished to dispose of his practice. The executive secretaries of a number of state medical associations gave valuable suggestions.

"Comparative Increases in the Cost of Medical Care and the Cost of Living" was hurriedly prepared for the use of the American Medical Association representatives attending the National Health Assembly in Washington on May 4, 1948.

"An Annotated Bibliography on Group Practice, 1927-1947" is a summary of the literature on group practice and has been very well received. This bulletin is the first published item in the Bureau's continuing study of group practice.

"What is the Leading Cause of Death?" was published in THE JOURNAL for Oct. 16, 1948. This is a statistical and actuarial study which shows that accidental deaths cut off more years from the working lifetimes of the American people in 1945 than any one natural cause of death. This bulletin is an eloquent testimonial, albeit statistical, of both specific medical progress (control of pneumonia and tuberculosis) and general medical progress (sharply lower mortality among young persons). It is believed that this study will reorient public thinking on the nation's health problems.

"How Rich Are You?" is a small pamphlet in which an indirect method is employed to refute the notion that the citizen "can get something for nothing." This widely held notion is the root cause of much of the support for socialized medicine. This bulletin is of interest to physicians' wives or to anyone who keeps household accounts for a family.

"The Cost and Quantity of Medical Care in the United States" is the most exhaustive study the Bureau has published since it was reorganized in the fall of 1946. It covers three aspects of medical economics—cost, price and quantity of medical care. On the cost side, attention is called to the increase in the dollars which the American people spend for medical care and the fact that these dollars are a decreasing percentage of total consumer expenditures for all goods and services. It is particularly noteworthy that the percentage of total consumer expenditures for physicians' services has been declining more rapidly than have the percentages for the other items in medical care. In fact, the physician in 1929 received 32 cents out of the average dollar spent by the consumer for medical care; in 1935-1939 the physician's share had dropped to 31 cents, and in 1947 it was slightly more than 25 cents. Thus it is clear that the physician's share is on the decline. On the other hand, the hospital share has risen from 13 cents in 1929 to 21 cents in 1947. The second aspect covered is prices (or fees). In the last ten years unit prices of goods and services purchased by consumers—the cost of living—have risen 59 per cent, whereas unit prices—fees, hospital room rates—in the medical care field have risen only 32 per cent. Again we say that medical care prices have behaved much better from the point of view of the consumer than have prices generally. The third aspect covered in this bulletin is quantity of medical care. This is practically the first treatment of the subject of quantity of medical care in the literature of medical economics. Although the data have severe limitations, the conclusion is that the quantity of medical care received by the American people has been increasing rapidly in the past decade and far more rapidly than the number of physicians. This conclusion is particularly important in the light of various claims that there is a great shortage of physicians in the United States.

The steady demand for the bulletins published in 1947 and 1945 has required the Bureau to reprint some of them. The Bureau has made available to the state medical associations for public relations purposes slides of the charts used in the article, "Is Medical Care Expensive?" and has offered to do the same with respect to "The Cost and Quantity of Medical Care in the United States." The last paragraph of this bulletin includes the following statement: "The quest for better health, improved

medical care and longer life is a never-ending quest. It will continue as long as pain comes too often and death too soon. Members of the medical care team have an unlimited opportunity to improve medical care and at the same time are exposed to the hazard of attaining one goal only to find that the goal has been moved up. The demand for improved medical care is well-nigh insatiable, and those who try to provide it are subject to easy criticism."

The response to the bulletin on "The Cost and Quantity of Medical Care" and its companion bulletins has convinced the Director of the Bureau that some of the attacks on the American medical profession are due to lack of understanding of the unique function of the physician in our society. Medical care can and will improve but it can never be adequate. The number of deaths is not as important as the average number of years the decedents had lived.

In addition to these Bureau bulletins, more than a score of major articles and book reviews have been published in THE JOURNAL. This increase in the number of items published measures the growing maturity of the research staff of the Bureau. Some of the longer reviews of important books have been mimeographed and sent to the members of the House of Delegates. The Director has read several manuscripts dealing with statistical data and methodology for the Editorial Department.

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The IBM section of the Bureau of Medical Economic Research has performed work [at cost] for a number of agencies. It has assisted the Council on Medical Education and Hospitals in making a considerable number of the tabulations for the hospital and licensure numbers of THE JOURNAL. An analysis of differences in clauses in policy forms was made at cost for Associated Medical Care Plans. Special tabulations of all the physicians in the state of Illinois were made at cost for the Illinois Department of Health. The addresses of approximately 9,000 physicians in the age group 19-25 were listed for the Office of Selective Service Records. Analyses of two questionnaires on advertising matters were made for the Advertising Department.

The principal IBM operation during the past nine months has been the development of the three card file. There will be three basic cards for each of the 220,000 physicians in the United States, Canada and the United States possessions. In a few weeks the Directory Department will provide galley proofs of the new American Medical Directory, and additional information from these galley proofs will be punched into the cards. The Bureau punch card file will ultimately contain a considerable number of categories of information which will not be published in the Directory. It is hoped that the three card file can be completed by the middle of 1949. IBM operations consume more than one half of the budget of the Bureau.

Two major research projects are still in progress. Reference has already been made in this report to the bibliography on group practice, the first step in the special study of group practice. The establishment of medical service areas has proceeded at a steady pace. They are almost completed in every state. The study probably will be published during the summer of 1949, and when completed will show that everyone in the United States has access to physicians and that each square mile in the United States is located in a medical service area in which there are physicians. This is a joint project with the constituent state medical associations. Some of the state associations have already found their medical service areas useful tools in the field of public relations.

REFERRALS FROM HOUSE OF DELEGATES

The Bureau has noted the recommendation contained in the report of the Committee to Study Conditions of General Practice and Committee on Nursing Problems, which were presented to the House of Delegates at the 1948 annual session. Through its punch card system, the Bureau has accumulated a considerable amount of data on the distribution of physicians. In the Aug. 21, 1948 issue of THE JOURNAL the Bureau presented a tabulation of the number of physicians by states; it was noted that the number of physicians had increased 17 per cent, whereas the population had increased only 12 per cent. As the work of keeping the punch card file progresses the Bureau will offer special tabulations for publication in THE JOURNAL. The next will be an age distribution of physicians by states and an estimate of the number of people per physician in each state.

The Reference Committee on Legislation and Public Relations directed the Bureau to study the matter of life insurance fees pursuant to a resolution introduced by a delegate from New Jersey. At the present writing the Bureau is awaiting the compilation of replies to a comprehensive questionnaire survey on medical fees by the life insurance companies. An analysis of this questionnaire will be prepared and made available to the members of the House of Delegates at the December meeting if the survey is completed by November 15.

Bureau of Exhibits

The Bureau of Exhibits has continued to function with greatly increased activities.

The work of the Bureau includes several divisions. The Scientific Exhibit is presented at the Annual and Interim Sessions of the Association under the Committee on Scientific Exhibit of the Board of Trustees. Medical exhibits are prepared with the advice of the various councils and bureaus of the Association and are shown at numerous medical meetings and other scientific organizations. Health exhibits are prepared for use at fairs, expositions and other public gatherings. The subject of medical motion pictures, in which field the Association has assumed leadership, is administered under the guidance of the Committee on Medical Motion Pictures. Other miscellaneous activities connected with graduate medical instruction and health education are also directed to the Bureau.

The staff of the Bureau has remained small, with each division of the work under the management of persons selected for their experience and adaptability in their particular fields.

THE SCIENTIFIC EXHIBIT

The year 1948 is marked by three sessions of the American Medical Association, for each of which a Scientific Exhibit has been prepared. The report of the work of the Bureau in connection with the Interim Session in Cleveland was included in the report to the House of Delegates in June. The program for the Interim Session in St. Louis is in the process of completion.

The Scientific Exhibit at the Chicago Session was an outstanding success. The care with which the exhibitors selected their material, the artistic ability with which they displayed it, the patience and perserverance of the demonstrators through the long days of the week all resulted in crowded aisles. The studious attitude of the physicians present attested to the value of this form of graduate medical instruction.

The Special Exhibit on Fractures was more popular than ever, even though the subject has been shown more or less continuously for twenty years. Dr. Kellogg Speed, Chicago, assisted by a competent committee and a large corps of demonstrators, deserves much credit for this type of presentation.

The Special Exhibit on Physical Medicine, shown for the third time with Dr. Frank H. Krusen, Rochester, Minn., as chairman, not only had a spectacular appeal, but included the practical information necessary for the physician in general practice. The constant throng surrounding the eight booths in the exhibit was an indication of the desire on the part of physicians for more knowledge on the subject.

The Special Exhibit on Fresh Pathologic Material, under the direction of Dr. I. Davidsohn, Chicago, proved a valuable part of the meeting. The cooperation of various hospitals and the continuous demonstrations by competent pathologists attracted a constant attendance of intent observers.

The group of exhibits on diabetes was supplemented by clinical presentations in an adjoining room. Dr. Howard F. Root, Boston, arranged a most attractive program which was one of the most popular features of the meeting.

Cancer detection was emphasized by a group of eleven exhibits presented with the cooperation of the American Cancer Society, the American College of Surgeons and the Cancer Prevention Center of Chicago. The chairman was Dr. Augusta Webster, Chicago.

The medical aspects of atomic energy were featured by a group of ten exhibits which attracted an unusual amount of attention. The Atomic Energy Commission, the Army, Navy and Air Force, as well as individual investigators, participated.

The seventeen sections of the Scientific Assembly presented outstanding groups of exhibits dealing with the various branches of medicine. The exhibits were selected for their suitability for the physician in general practice from 294 applications for space, 169 being selected for the sections and 31 placed in a miscellaneous group. The various sections appointed representatives to advise and assist the Committee on Scientific Exhibit, and each application was submitted to five or more persons separately, from whom it received unanimous approval before acceptance. The largest number of exhibits was presented by the Section on Surgery, General and Abdominal, with 26, while the smallest number was in the Section on Anesthesiology, with 4.

There were 26 awards, consisting of 6 medals, 10 certificates of merit and 10 honorable mentions. In addition, three groups of exhibits received special commendation. The Committee on Awards consisted of Dr. Frank W. Hartman, Detroit, chairman; Dr. Wilbur Bailey, Los Angeles; Dr. David Bosworth, New York; Dr. Deryl Hart, Durham, N. C., and Dr. Joe Vincent Meigs, Boston.

The Committee on Scientific Exhibit worked closely with the Council on Scientific Assembly on the program. Twenty-seven papers read before the Sections were correlated with exhibits.

Motion pictures were shown in two theaters, simultaneously and continuously, in an area adjoining the exhibits. Thirty-seven films were selected from 74 applications, most of the films being previewed by competent consultants before acceptance or rejection. The audiences were large and enthusiastic, a count of the attendance totaling 14,280 persons (this includes duplications of those who stayed to see more than one film). Several of the films illustrated exhibits on the same subject.

ASSOCIATION EXHIBITS

Professional relations with many thousands of physicians, as well as public relations with hundreds of thousands of other persons, were enhanced through exhibits depicting the activities of the various councils and bureaus of the American Medical Association headquarters. The opportunities for this kind of activity are numerous, the audience attend in a receptive mood and the graphic presentations make a lasting visual impression.

The Bureau has on hand forty-eight exhibits, nine old exhibits being discontinued and eight new ones added during the year. Each exhibit is checked and repaired after each trip. At present, working and storage facilities are inadequate for this activity, but it is hoped that with the completion of the addition to the Association's building more space will be available.

One hundred and thirty exhibits were shown, or had been reserved at the time of this report, for 82 meetings during the year, and additional requests are still being received. The demand greatly exceeds the number of exhibits available, especially at certain seasons. There were 38 medical meetings or other professional gatherings, including those of dentists, pharmacists, nurses and various scientific groups, at which 61 exhibits were shown. An attendant from the headquarters staff was present at each of these meetings to demonstrate the exhibit. Sixty-nine exhibits were shown at 44 fairs and expositions, the material being sent out on a loan basis, with a member of the local county or state medical society in charge.

The duration of each exhibit averaged one week, making nearly one thousand days for this group of displays during the year. The exhibits were shown in thirty states and the District of Columbia. Requests from outside the limits of Continental United States were refused because of the cost and difficulties with custom regulations.

MUSEUMS

The several health museums in the country, which are visited by some millions of persons, have had exhibits from the American Medical Association on permanent display. The Cleveland Health Museum, the Toledo Museum of Science, the Dallas Health Museum, and the Chicago Museum of Science and Industry are especially to be commended in this regard. Temporary displays have gone to other museums as well.

The museum is an excellent medium for health education, with a ready made audience which attends in a receptive attitude.

COMMITTEE ON MEDICAL MOTION PICTURES

There has been a considerable increase in all phases of activity over last year. As the Association's motion picture program becomes more widely known, a greater number of medical societies, medical schools, hospitals and individual physicians are calling for various types of service.

Library of Medical Films.—A total of 1,091 films were lent to various organizations and physicians during the first eight months of 1948 in 45 states, as well as to Mexico and Bolivia. In order to help meet the increasing cost of operating the motion picture library, the Committee voted to make a service charge of $1 per reel (400 feet) for the use of the films, but to date details for handling the problem have not been worked out.

Inasmuch as there are a great many sources of health films, the Committee decided that the American Medical Association should not distribute such films to lay groups. A select group of health films are available, however, to Fellows of the American Medical Association who are called on to speak before service clubs, Parent-Teacher Associations and other public groups. Thirty-three prints of twelve new films were added to the motion picture library during the first eight months of the year.

Reviews of Motion Pictures.—Because of printing difficulties, the number of motion picture reviews published in THE JOURNAL was somewhat curtailed; nevertheless, forty-one reviews were published during the eight month period. These reviews are widely read by the medical profession in the United States and foreign countries. A pamphlet has been prepared, containing reprints of the medical motion picture reviews published in THE JOURNAL through January 1948. The purpose of these reviews is to provide a brief description and evaluation of motion pictures which are available to the medical profession.

Source List.—The source list of medical films has been revised and brought up to date. Eighty-eight lists also have been prepared on specific subjects, such as pathology, immunology and hematology, containing titles of films on these subjects, where they may be obtained and other information.

The organization of a complete source file of available medical films is progressing slowly.

Special Projects.—The Sears-Roebuck Foundation is sponsoring the production of a motion picture dealing with rural health problems. Assistance has been given the project with background material and advice in the preparation of the script.

The Becton, Dickinson Foundation for the Advancement of Scientific Knowledge is sponsoring a film dealing with "The Physician's Responsibility in the Event of Major Disaster" and a committee of technical advisers has been appointed, consisting of Col. W. L. Wilson, M.C., United States Army, Washington, chairman; Dr. Frank Wilson, American Red Cross, Washington; Dr. Norvin C. Keifer, Chief, Health Emergency Planning Unit, U. S. Public Health Service, Washington; Dr. James C. Sargent, Chairman, Council on National Emergency Medical Service, American Medical Association; Dr. Perrin Long, Technical Medical Adviser to the Director of O.C.D. Planning, Baltimore, and the Secretary of the American Medical Association Committee on Medical Motion Pictures. The film should be in production early in 1949.

In connection with the 1948 Census of Hospitals and Report of Internships and Residencies, four questions concerning motion picture equipment and the use of medical motion pictures have been included in the questionnaire. The results of this preliminary survey should be available to the Committee in February 1949.

During the past eighteen months, the American Medical Association has received approximately seventy-five requests from thirty-three different countries for the loan or purchase of American made medical films. These unsolicited requests have come from medical schools, hospitals and individual physicians.

A survey has been made to determine the number of states which maintain film libraries in connection with the state health

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departments. It was found that all of the states have film libraries, but most of them confine distribution to their own states and several restrict distribution to county health departments.

MISCELLANEOUS ACTIVITIES

Numerous talks have been given by members of the staff to scientific groups and luncheon clubs. Conferences with physicians and other persons, both from the United States and foreign countries, have been of almost daily occurrence. Members of the staff have served on many committees of organizations allied to the American Medical Association and have given freely of their knowledge and energy. Pamphlets and articles have been prepared for publication and books reviewed for THE JOURNAL.

The preeminent place of leadership which the Association has attained in both the exhibit field and in motion pictures has brought numerous requests for information and advice, all of which have been given careful attention.

Conclusion

Reports of committees, such as the Committee on Hospitals and the Practice of Medicine, the Committee on Nursing Problems which now represents the Association on the Joint Commission for the Improvement of Medical Care, the Committee on Rebates and the Committee on Rural Medical Care will be presented in the Handbook of the House of Delegates or in a Supplementary Report of the Board of Trustees to the House.

Respectfully submitted,

ELMER L. HENDERSON, Chairman.
EDWIN S. HAMILTON, Secretary.
LOUIS H. BAUER.
JOHN H. FITZGIBBON.
JAMES R. MILLER.
WALTER B. MARTIN.
DWIGHT H. MURRAY.
EDWARD J. MCCORMICK.
GUNNAR GUNDERSEN.

REPORT OF COUNCIL ON MEDICAL EDUCATION AND HOSPITALS

To the Members of the House of Delegates of the American Medical Association:

The major concerns of the Council on Medical Education and Hospitals during the six months since it last reported to the House of Delegates have been with the financial support of medical schools, the actions taken by the House of Delegates at the June 1948 Session which were referred to the Council, the deferment of medical and premedical students under the Selective Service Act of 1948, and the development of a plan for meeting effectively the Council's increasing responsibilities for the approval of internship and residency training programs.

FINANCIAL SUPPORT OF MEDICAL SCHOOLS

During the last three years the Council has been directing attention to the fact that the major problem currently facing the medical schools of the United States is the need for additional funds for the development and stabilization of their basic educational programs. Inflation, decreased income from endowments and changes in the tax structure which have led to a decrease in the size of individual benefactions, have created a serious problem for the medical schools. This problem affects the schools both with respect to maintaining established programs and with respect to undertaking essential new developments.

In the past year there have been numerous discussions pointing to the possibility that to solve their financial problems the medical schools may have to accept federal subsidy. A bill, S. 2388, to provide such subsidy was introduced into Congress in April 1948 by Senator Thomas of Utah. No hearings were held on the bill, but it may be predicted that bills of a similar nature will be introduced into the next Congress.

The Council has given close study to the financial needs of the medical schools and to the issues involved in federal subsidy of the medical schools. As a result of this study, the Council is strongly of the opinion that before resort is made to federal subsidy an intensive and concerted effort should be made to secure the funds required by the medical schools from voluntary sources. The Council is further of the opinion that there is good reason for believing that, if such an effort is made, support can be obtained in adequate measure.

In June of this year the Council sought and obtained authorization from the Board of Trustees to explore with representatives of the Association of American Medical Colleges and other interested organizations the possibility of establishing a National Foundation for Medical Education which would have as its objective the securing of funds from voluntary sources for the basic support of the medical schools of this country. In July of this year, under the joint sponsorship of the Council and the Association of American Medical Colleges, a meeting was held in New York City of representatives of universities, business, industry, banking, educational foundations and voluntary philanthropic organizations in the health field, to discuss the feasibility of a national campaign for the support of medical education.

After presentation and discussion of the problem, the consensus was that such a campaign was highly desirable and offered definite promise of success. A lay committee was appointed under the chairmanship of Mr. Earl Bunting, Managing Director of the National Association of Manufacturers, to study the problem further and report back to the Council and the Association of American Medical Colleges. During August and September this committee and a subcommittee under the chairmanship of Mr. Earl O. Shreve, President of the United States Chamber of Commerce, held three meetings in New York City. Additional meetings will be held throughout the fall, with the expectation that a definite plan of organization for a National Foundation for Medical Education will be ready for presentation to the Council and the Association of American Medical Colleges by the end of 1948 or the early part of 1949.

It has been a source of great encouragement to observe the deep interest which the leaders of commerce and industry have shown in the problems of the medical schools and the time and energy that they are devoting in seeking a solution. It is too early to judge the final outcome, but it can be said that the outlook for adequate support of the medical schools from voluntary sources is brighter at the present than at any time in recent years.

REPORT ON MATTERS REFERRED TO THE COUNCIL BY THE HOUSE OF DELEGATES

At its June 1948 meeting the House of Delegates referred a number of resolutions to the Council. A summary of the Council's action on these resolutions follows:

Recommendations contained in the Report of the Committee on Intern Placement are:

The amendments to the 1948 Plan for Uniform Intern Placement suggested by the Committee in collaboration with the Joint Intern Committee were approved by the Council and the other organizations sponsoring this plan. The amended plan was published in THE JOURNAL Aug. 14, 1948.

The Council is in full accord with the recommendation that hospitals and medical schools which do not cooperate with the plan be reported to the Council for investigation and appropriate action. This recommendation is now being studied by the other agencies sponsoring the Plan for Uniform Placement.

The recommendation that all specialty boards require at least one year of approved rotating internship before allowing a physician to start his specialty training has been forwarded to the Advisory Board for Medical Specialties and will be discussed at the next meeting of the Liaison Committee of the Council and the Advisory Board.

Recommendations concerning the scope, character and duration of an approved rotating internship are being incorporated by the Council in an extensive revision of its "Essentials of An Approved Internship," which the Council now has under preparation. As soon as the revision is completed, the revised "Essentials" will be presented to the House of Delegates for ratification.

The recommendation that specialty boards should be requested to give credit toward certification for work in their respective fields during the second year of a rotating internship has been forwarded to the Advisory Board for Medical Specialties and will be discussed at the next meeting of the Liaison Committee of the Council and the Advisory Board.

With respect to the recommendation that hospitals at present approved for internship should be reappraised on the basis of their educational program for interns, the Council is continuously resurveying and reappraising approved hospitals within the capacity of its staff. A general reappraisal will be initiated after the revised "Essentials of An Approved Internship" have been adopted by the Council and ratified by the House of Delegates.

The recommendation that any hospital which does not provide an adequate educational program for interns may be approved for general residencies has been interpreted by the Council as meaning that hospitals which meet its "Essentials for a General Residency" may be approved even though they may not provide an educational training program for interns. The Council now lists 90 hospitals that are approved for general residencies but not for internships and will add other hospitals to this list as they demonstrate their ability to offer a satisfactory training program.

Resolution that the American Medical Association institute a program to allocate the number of interns of all approved hospitals on an equal basis according to yearly admissions and that this be referred to the Council on Medical Education and Hospitals for consideration. The Council is being guided by this resolution in revising its "Essentials of An Approved Internship."

Recommendations contained in the Report of the Committee to Study Conditions of General Practice are:

That the Council on Medical Education and Hospitals and the Bureau of Medical Economic Research determine whether or not there is need for a large increase in the number of medical graduates and, if so, its extent.

The Council and the Bureau have collaborated in studying this problem. Information provided by the study has served as the basis for an editorial in THE JOURNAL, a report to the National Health Assembly, for talks and discussions by officers of the Association and for replies to numerous inquiries from government agencies, medical societies, universities, the press and individuals. These studies have led to the conclusion that there is no need for any great increase in the number of medical graduates and that the gradual expansion of facilities for medical education that is taking place will adequately meet the nation's needs. The Council will continue to give close attention to this problem.

That the Council on Medical Education and Hospitals proceed with the development of a program for the training of general practitioners in smaller community hospitals.

The Council is formulating standards for residencies in general practice. When these standards have been developed, smaller community hospitals that are willing and prepared to give proper supervision to the training of residents in general practice will receive every encouragement from the Council.

Resolution that the Council investigate the Association of Interns and Medical Students and the Association of International Medical Students as to facts, tendencies, affiliations and objectives.

The Council has this resolution under study but is not yet prepared to report on it.

DEFERMENT OF PREMEDICAL AND MEDICAL STUDENTS UNDER THE SELECTIVE SERVICE ACT OF 1948

The Selective Service Act of 1948 renders liable for service in the armed forces men between 19 and 25 years of age, the age group from which the great majority of premedical and medical students are drawn. Immediately on passage of the act, representatives of the Council and the Association of American Medical Colleges began a series of conferences with officials of the National Headquarters of the Selective Service System to develop a plan for the deferment of all medical students and a sufficient number of premedical students to insure that there would be no reduction in the years ahead of the number of students and graduates. The officials of the Selective Service System have shown a good understanding of the problem and have been very cooperative in approaching the question of deferments. They have made it clear that bona fide medical students and physicians in their first year of internship will be deferred as long as they maintain a satisfactory academic standing. While no announcement has yet been issued concerning the deferment of premedical students, there is every reason to believe that a plan which has the endorsement of the Council and the Association of American Medical Colleges will be officially adopted by the National Headquarters of the Selective Service System at an early date.

PART TIME HOSPITAL INSPECTORS

The reduction in the professional staff of the Council during and immediately after the war and the rapid postwar expansion of residency training programs created serious difficulties for the Council in carrying out its inspection of hospitals holding or seeking approval for internships and residency training. Even with its staff again at full strength, it became clear to the Council that the backlog of hospitals requiring inspection that had accumulated during the last five years could not be satisfactorily inspected unless a plan was devised for securing the assistance of additional personnel. Accordingly, the Council has requested and obtained from the Board of Trustees permission to enlist the services as part time inspectors of fifteen qualified physicians in different areas of the country. It is planned that each of these inspectors will survey about 40 hospitals during the coming year for a total of 600 hospitals. During the same period, the full time staff of the Council will survey approximately the same number of institutions, so that by the end of 1949 the Council will be operating on a current basis with respect to the inspection of hospitals.

The Council has shared the increasing concern of the House of Delegates, the American Boards and other groups interested in graduate education with respect to the need for a periodic reappraisal of hospitals holding approval for internship and residency training. The Council is confident that once it is operating on a current basis, it should be able to institute a program of triennial reinspection of all approved hospitals and more frequent reinspection of those requiring special attention. Such a program is essential for the maintenance of high standards of graduate training in the hospitals throughout the country.

COLLABORATION AND LIAISON WITH OTHER AGENCIES

The Council has continued to maintain a close liaison with other agencies and organizations active in the field of medical education and hospital affairs. The close relations that the Council enjoys through regularly constituted liaison committees with the Association of American Medical Colleges and the Advisory Board for Medical Specialties have been particularly beneficial. The Council has continued its cooperation with the Army, Navy, the U. S. Public Health Service and the Veterans Administration in the development of their programs for graduate medical training. Collaboration with numerous other agencies in the field of health, medicine and education has continued. These conjoint activities have been varied in nature and have involved members of the Council, the Secretary and the members of the staff of the Council. These cooperative enterprizes have included consultations, participation in conferences, meetings, the work of advisory committees and joint sessions. A partial list of the agencies and organizations not mentioned elsewhere in this report with which the Council has collaborated during 1948 includes:

The American Hospital Association
The Catholic Hospital Association
The American Trudeau Society
American Orthopedic Association
American Academy of Orthopedic Surgeons
Southern Medical Association
National Society for Medical Research
National Health Assembly
American College of Surgeons
Federation of State Medical Boards
United States Office of Education
State Department
Florida State Board of Education
National Nursing Council
American Nurses Association
National Board of Medical Examiners
American Physiotherapy Association
American Registry of Physical Therapy Technicians
American Occupational Therapy Association
American Association of Medical Record Librarians
College of American Pathologists
American College of Radiology
American Registry of X-ray Technicians
Board of Registry of Medical Technologists
State Medical Societies
County Medical Societies

MEDICAL SCHOOLS

During the first nine months of 1948 the following medical schools were visited for consultation, survey or other purposes:

Hahnemann Medical College and Hospital of Philadelphia
Medical College of the State of South Carolina
University of Oklahoma School of Medicine
Howard University College of Medicine
Loyola University School of Medicine
University of Buffalo School of Medicine

INSPECTION OF HOSPITALS AND TECHNICAL SCHOOLS

Inspections of hospitals and technical schools made by the Council during the first nine months of 1948 may be summarized as follows:

Intern training	26
Residencies and fellowships	136
Intern training and residencies	42
Registration	18
Technical schools	40
Total	262
Individual residencies and fellowships investigated	668

SUMMARY OF HOSPITALS AND TECHNICAL SCHOOLS

Figures for approved hospitals and technical schools with changes occurring during the first nine months of 1948 are as follows:

Registration of Hospitals	
Hospitals registered, Jan. 1, 1948	6,312
New institutions registered to Sept. 30, 1948	125
Closed or transferred to unclassified file	180
Hospitals registered, Sept. 30, 1948	6,257
Internship Approval	
Hospitals approved for intern training, Jan. 1, 1948	812
Approved to Sept. 30, 1948	28
Removed from approved list	6
Hospitals approved for intern training, Sept. 30, 1948	834
Residency Approval	
Hospitals approved for residency training, Jan. 1, 1948	1,086
Approved to Sept. 30, 1948	65
Removed from approved list	20
Hospitals approved for residency training, Sept. 30, 1948	1,131
Medical Technology Schools	
Approved schools, Jan. 1, 1948	308
Approved to Sept. 30, 1948	29
Removed from approved list	0
Approved schools, Sept. 30, 1948	337
Medical Record Librarian Schools	
Approved schools, Jan. 1, 1948	11
Approved to Sept. 30, 1948	1
Removed from approved list	0
Approved schools, Sept. 30, 1948	12
Occupational Therapy Schools	
Approved schools, Jan. 1, 1948	22
Approved to Sept. 30, 1948	3
Removed from approved list	0
Approved schools, Sept. 30, 1948	25
Physical Therapy Schools	
Approved schools, Jan. 1, 1948	26
Approved to Sept. 30, 1948	0
Removed from approved list	1
Approved schools, Sept. 30, 1948	25
X-Ray Schools	
Approved schools, Jan. 1, 1948	183
Approved to Sept. 30, 1948	29
Removed from approved list	1
Approved schools, Sept. 30, 1948	211

COUNCIL PUBLICATIONS

During 1948 the Council was responsible for preparing material for four special numbers of THE JOURNAL:

Internship and Residency Number
State Board Number
Hospital Number
Educational Number

Other regular publications of the Council during the year included:

Postgraduate Courses for Veteran and Civilian Physicians
Approved Examining Boards in Medical Specialties (a Summary of the Requirements for Certification Established by the American Boards)
Proceedings of the 1948 Annual Congress on Medical Education and Licensure (now in press)
Choice of a Medical School
Approved Colleges of Arts and Sciences
Federation Bulletin (a monthly bulletin published for the Federation of State Medical Boards)
Approved Internships
Approved Residencies and Fellowships in the Specialties
Schools for Medical Technologists
Schools for Physical Therapy Technicians
Schools for Occupational Therapy
Schools for Medical Record Librarians
Schools for X-ray Technicians

The Council also has reprinted for distribution a number of articles dealing with questions relating to the Council's work and responsibilities. In addition, the Council has published numerous statements in THE JOURNAL from time to time concerning current problems.

ELECTION OF DR. WILLIAM LOWRY PRESSLY TO THE COUNCIL

Dr. William Lowry Pressly of Due West, S. C., was elected by the House of Delegates to fill the vacancy on the Council created by the death of Dr. John H. Musser.

PROFESSIONAL STAFF CHANGES

Dr. Edward H. Leveroos has been made an Associate Secretary of the Council by the Board of Trustees. Dr. Leveroos heads the internship and residency section of the Council's professional staff.

Dr. William W. Southard of Los Angeles and Dr. Robert C. Parkin of New Albin, Iowa, have been appointed to the professional staff. Dr. Edward K. Reid has resigned from the staff to accept a commission in the U. S. Public Health Service.

APPRECIATION

To carry out much of its program the Council on Medical Education and Hospitals must rely on the cooperation of numerous institutions and organizations. In every instance this cooperation has been given willingly and fully. The Council wishes at this time to record its sincere gratitude for the assistance so received. The Council is particularly grateful for the splendid support and cooperation that it has continued to receive from the officers, trustees and members of the House of Delegates of the American Medical Association. Their understanding and willingness to aid in the solution of the many difficult problems that have confronted the Council during the past year have been a continuing source of encouragement and gratification.

Respectfully submitted.

HERMAN G. WEISKOTTEN, Chairman
REGINALD FITZ
RUSSELL L. HADEN
WILLIAM S. MIDDLETON
VICTOR JOHNSON
HARVEY B. STONE
WILLIAM L. PRESSLY
DONALD G. ANDERSON, Secretary.

REPORT OF THE COUNCIL ON SCIENTIFIC ASSEMBLY

The Council on Scientific Assembly has met three times since the 1948 Annual Session in Chicago, once on July 24 in Chicago and once on September 28 in St. Louis and again on November 13 in Chicago.

The Council offers the Scientific Program for the St. Louis Interim Session as part of its report.

SECTION ON DISEASES OF THE CHEST

The following officers were appointed to serve at the first meeting of the Section on Diseases of the Chest, to be held at the 1949 Annual Session in Atlantic City: Dr. Shelley U. Marietta, Washington, D. C., Chairman; Dr. Harry C. Warren, San Francisco, Vice Chairman, and Dr. Jay Arthur Myers, Minneapolis, Secretary.

After full discussion, the Council ruled that, in accordance with the provisions of the Constitution and By-Laws, a delegate and an alternate delegate to the House of Delegates for the new Section on Diseases of the Chest should be elected by the Section at its first Section meeting.

SECTION ON MISCELLANEOUS TOPICS

The Council allotted two sessions in the Section on Miscellaneous Topics at the 1949 Annual Session in Atlantic City to Physical Medicine and appointed Dr. Howard A. Rusk, New York, to serve as Chairman, and Dr. Frank H. Krusen, Rochester, Minn., as Secretary.

The Council allotted one session in the Section on Miscellaneous Topics at the Atlantic City Session to Allergy and appointed the following officers: Dr. Charles H. Eyerman, St. Louis, Chairman, and Dr. Harry L. Huber, Chicago, Secretary.

The Council considered the desirability of having a session on the History of Medicine at each Annual Session of the American Medical Association. Having in view the relatively small attendance at these meetings in the past, it was the opinion of the Council that historical medicine should be encouraged, nevertheless, and meetings held every second or third year.

ALLOCATION OF SECTION MEETINGS AT THE ANNUAL SESSION

The revised By-Laws adopted at the 1948 Annual Session in Chicago grant to the Council on Scientific Assembly the power of determining the number of sessions, up to a maximum of three, for each section at each annual session. The Council has long been active in surveying the attendance at various section meetings at the annual sessions and, during the last five years at four annual sessions, a count has been made of the approximate attendance at each session of a section meeting, except when two sections combined for one meeting. The figures presented to the Council are contained in the following chart.

Approximate Attendance A. M. A. Section Meetings 1944—1946—1947—1948

	Wednesday				Thursday				Friday			
	1944 Chi.	1946 S. F.	1947 A. C.	1948 Chi.	1944 Chi.	1946 S. F.	1947 A. C.	1948 Chi.	1944 Chi.	1946 S. F.	1947 A. C.	1948 Chi.
Pathology and physiology	150	190	120	382	75	100	220	210	75	200	115	132
Experimental medicine and therapeutics	700	350	1,000	146	535	400	900	97	...	1,000	...	708
Urology	190	200	225	300	180	220	250	185	...	300	130	105
Dermatology and syphilology	225	200	300	300	325	300	350	345	175	120	175	250
Preventive and industrial medicine and public health	70	115	150	...	100	60	100	75	70	...	45	..
Gastro-enterology and proctology	375	200	700	512	400	165	700	350	...	200	...	..
Anesthesiology	120	165	210	134	160	145	150	129	250	120	120	163
Radiology	160	160	370	182	100	157	360	153	...	192	170	97
Obstetrics and gynecology	500	900	1,100	825	450	700	950	587	650	500	425	...
Surgery	1,000	1,100	1,500	775	800	600	800	725	1,300	150	1,200	550
Orthopedic surgery	200	240	600	280	150	165	200	225	210	120	165	167
Nervous and mental diseases	180	160	185	250	250	135	175	191	...	250	250	162
Laryngology, otology and rhinology	190	220	337	147	150	225	300	115	210	192	275	105
Ophthalmology	245	250	425	246	250	175	400	157	210	250	250	125
Internal medicine	950	1,200	2,350	2,375	1,000	1,100	1,400	2,125	1,300	1,000	1,900	...
Pediatrics	1,300	450	1,400	500	1,300	400	1,650	287	1,350	400	450	362
General practice medicine	...	250	400	180	...	290	400	275	...	500	120	280
Miscellaneous topics	350	...	...	...	325	...	...	...	...	...	...	...
Session on:												
History of medicine	...	...	50	...	...	...	...	...	...	...	...	30
Physical medicine	...	...	...	...	...	...	240	141	...	...	...	...
Allergy	...	...	...	165	...	...	...	...	...	...	410	...
Diseases of chest	...	...	...	...	...	...	...	220	...	...	...	...

On the basis of the figures as reported and taking into consideration the space available in appropriate localities in Atlantic City for meetings of the Sections, the Council allotted, for the 1949 session only, the following schedule of section meetings.

Section	Units
Internal Medicine	3
Surgery, General and Abdominal	3
Obstetrics	3
Pediatrics	3
General Practice	3
Ophthalmology	2
Laryngology, Otology and Rhinology	2
Experimental Medicine and Therapeutics	2
Pathology and Physiology	2
Nervous and Mental Diseases	2
Dermatology and Syphilology	2
Urology	2
Orthopedic Surgery	2
Gastro-Enterology and Proctology	2
Radiology	2
Anesthesiology	2
Diseases of the Chest	2
Preventive and Industrial Medicine and Public Health	2

In general the council followed the principle that the five sections with the largest attendance should be allotted three units at each annual session, a unit consisting of a half-day session. Twelve other sections were allotted two units each, and one, the Section on Preventive and Industrial Medicine and Public Health, a section with attendance reported to be usually less than one hundred at any one session, was allotted only one unit. On further consideration, the Council felt that, although the attendance at meetings of this section, as recorded, was small, the importance of public health and industrial medicine was such that two units should be allocated to this section. Thus the original ruling to allocate only one unit was rescinded, and two units were voted to the Section on Preventive and Industrial Medicine and Public Health.

The Council would call the attention of the House of Delegates to the fact that these allotments of units for each section at the annual session may be changed from year to year. It was the opinion of the Council that when a section, the number of meetings of which had been reduced, demonstrates by increased attendance and a more vital program that more units are warranted, the Council, guided by the attendance and interest shown, may increase the allotment of units to that section. The reverse may also be the case. Inferior programs and poor attendance will mean less units at the next year's session. The schedule for 1949, therefore, is not rigid, but is subject to review and change each year thereafter.

ANNUAL CONFERENCE OF SECTION SECRETARIES

The Annual Conference of Section Secretaries was held with the Council on Scientific Assembly on Nov. 13, 1948, at the headquarters of the American Medical Association in Chicago, and preparations were made for the usual scheduled section meetings for the 1949 annual session. Those sections which met in the mornings at the annual session in 1948 will meet in the afternoons at the Atlantic City Session.

Respectfully submitted,

HENRY R. VIETS, Chairman.
CHARLES H. PHIFER.
L. W. LARSON.
STANLEY P. REIMANN.
ALPHONSE MCMAHON.

Ex officio.
ERNEST E. IRONS, President-Elect.
MORRIS FISHBEIN, Editor, THE JOURNAL.
GEORGE F. LULL, Secretary.
ERNEST B. HOWARD, Assistant Secretary.

REPORT OF COUNCIL ON MEDICAL SERVICE

COMMUNITY LEADERSHIP

To the Members of the House of Delegates of the American Medical Association:

Emphasis during 1948 has been placed on community leadership in health problems by county medical societies and to a lesser extent by state medical associations.

Medical Society Surveys.—The first step in community leadership in health problems is to determine the capacity of county medical societies for promoting this leadership. What are the activities of county medical societies? Are they prepared to assume leadership? To answer some of these questions the Council on Medical Service turned directly to the county societies. Contacting all 2,100 component societies was impractical, so that a pilot questionnaire was sent to 250 selected societies in the forty-eight states. The results of the pilot questionnaire are interesting but not too encouraging. Full tabulation has been completed and mimeographed and copies sent to all society secretaries.

As with the component county medical societies, it was necessary to know more about the constituent state medical associations. A questionnaire was forwarded to every state association secretary for the purpose of learning more about activities and work in the health care field.

The information gained from both surveys has enabled the Council to act as a clearing house on medical society activities. The demand for this type of service is continually increasing. Medical societies are rapidly expanding their activities and are anxious to learn of existing experiences. The Council is now in a position to supply information that will assist the societies in developing programs.

Health Councils.—Since the Council on Medical Service first reported to the House of Delegates on health councils in June 1946, the subject has become of widespread interest. This interest has been furthered through the News Letter, regional conferences, a special brochure and correspondence.

Health councils seem to be an excellent medium through which community leadership in health problems may be attained. However, the term health council is used in a variety of ways. It means different things to different persons, and final determination of the use of the term will require further consideration of the entire program.

At present there appear to be three types of general health councils: State health councils, metropolitan health councils and community health councils. The three types are organized in a variety of ways and for a number of different purposes. Best known of the state health councils are those made up of professional groups (such as medical, dental and pharmaceutic), those composed of voluntary health agency representatives and those set up by official action of the state government. Examples of the first are the health councils in Illinois and California, of the second the health councils in Virginia and Vermont and of the third the health council in Indiana.

The metropolitan health councils are those found in cities, usually 50,000 or more in population. These are generally composed of representatives of voluntary health agencies and of the professional societies. Many of them are sponsored and financed by the local community chest agency.

The community, including rural health councils, are probably the latest type to develop. The efforts of the Council on Medical Service in this activity are being coordinated with those of the Committee on Rural Medical Service.

In addition, the term health council is used in a limited sense in connection with school health and public health. There is also a national organization known as the National Health Council which is devoting most of its efforts to the promotion of local health departments or units.

The Council's efforts in this field are primarily devoted to determining the facts, reporting and interpreting these facts to the medical profession and arousing an interest on the part of medical societies in taking a more active part in the work of the health councils.

REGIONAL CONFERENCES

The regional conferences continue to perform a much needed function—the exchange of ideas between the constituent and component medical societies and the American Medical Association. Regional conferences were held in 1948 in Cleveland; Spokane, Wash.; Denver; Philadelphia; Columbia, S. C.; St. Paul, and Tulsa, Okla. A development during 1947-1948 was the joint sponsoring of the regional conferences by the Council on Medical Service, the Council on Industrial Health and the Committee on Rural Medical Service. The purpose of this move is twofold: first, to provide a better picture of the work of the Association and, second, to widen the scope of subjects discussed. If and when the Association funds permit, it is hoped that other councils will find it possible to join in the sponsorship.

NEWS LETTER

The House of Delegates at the 1947 Annual Session recommended "that the Board of Trustees investigate the possibility of extending the news letter mailing list to include all Fellows of the American Medical Association, and if this is impossible that at least it be sent to all officers of component county societies." Inclusion of all Fellows of the Association has not been possible. However, the county medical societies are now receiving the news letter and several state medical associations have offered to mail copies of the news letter to their membership, provided that the Council could supply a sufficient number of copies. The regular mailing list includes approximately 6,000 physicians, auxiliary members and others interested in medical service programs.

SPECIAL PROJECTS

Fund-Raising Groups.—Physicians throughout the nation are feeling the pressure of the increasing demand made on them by the numerous so-called voluntary health organizations. For many years physicians have cooperated with the programs devised by the National Tuberculosis Association, the American Red Cross and the National Association for Crippled Children. Effort has not always been made to devise a program that would be fair to the physician as well as to the public.

More recently the profession has been called on by the American Cancer Society to make its cancer detection program effective. Here, however, the Board of Trustees and the Council on Medical Service of the American Medical Association entered the picture and worked for a realistic policy which included the county medical society and the individual physician. As a result, the American Cancer Society's program has produced many local experiments designed to fit local opinion and needs, with the full approval of the county medical societies. Presently, if the trend continues, the physician will be confronted with even greater demands. Programs are in process by the American Heart Association, the American Diabetes Association and others. In view of this trend, the Council proposes to determine the success that county medical societies have had in serving and coordinating the various programs. Only in this manner will it be possible to set forth sound policies to be used as guide posts for future county medical society relations with voluntary health organizations.

Assistance at the national level would aid materially in protecting the individual physician against undue demands on the part of voluntary health agencies. The Board of Trustees has recognized this in several instances. However, the Council recommends to the House of Delegates that further effort be made to obtain direct representation of the Association on all of the national voluntary health organizations. The Council further believes that it would be helpful to sponsor a coordinating committee, composed of representatives of all such national groups, for the purpose of developing policies applicable at the county medical society level.

GROUP PRACTICE

Interest in group practice has increased during the past two years, particularly among the returning servicemen. The Council has followed the discussions of group practice in the various medical journals.

In June 1947, the House of Delegates approved a resolution referring the study of the question of group practice to the Board of Trustees and suggesting that the Bureau of Medical Economic Research, the Judicial Council, the Council on Medical Service and the Bureau of Legal Medicine and Legislation cooperate in the project. The Board of Trustees, in turn, referred the matter to the Council on Medical Service, requesting the appointment of a subcommittee on group practice. Following these actions the Council requested a conference of headquarters personnel representing the aforementioned groups. At that time the details of the study were given over to the Bureau of Medical Economic Research. Undoubtedly, the Bureau will comment on this in detail in its report.

It is important here to note that when the Trustees referred the question of a group practice study to the Council, they directed the subcommittee and the Judicial Council to draw up standards, although the problem of standards was not considered in the original resolution of the House of Delegates. The Council has discussed at length the possibility of setting standards for group practice and is hesitant to enter into such a project. The Council has, however, requested its subcommittee to keep this problem in mind during the study. Further reports on this subject will be made during or on completion of the study.

COMPULSORY SICKNESS INSURANCE

Public interest in compulsory sickness insurance continues unabated. Requests for information continue to pour in from physicians, students and others preparing speeches and articles or just interested in the subject. The Council wishes to call the attention of the House to a serious situation; that is, to the absence in school, college and public libraries of reference material presenting arguments against compulsory sickness insurance. The Council's correspondence reveals many persons willing to oppose government control of medical care, but handicapped in sources to which they may turn for arguments.

The Council has approached the problem in four ways: first, by maintaining a supply of various reprints and pamphlets for distribution to students, etc.; second, by preparing reference material in bound volume form suitable for library use; third, by making available "loan kits" on the subject for use in cases where detailed reference data are needed, and fourth, by preparing and making available a bibliography on sickness insurance publications.

Literally thousands of articles, pamphlets and speeches are written annually in opposition to government medicine. Most of them are a repetition of nebulous arguments, many of which are thoroughly sound and extremely important but no longer sufficient to satisfy many students, speakers or writers. Basic facts, figures and specific information are too often missing. In an effort to remedy this, the Council staff is reviewing literature on the subject with the view to preparing a series of small booklets suitable to all but the research student. The Council believes that these should be placed in every college, medical school and hospital library. Supplying public and high school libraries is also important, but is too expensive a job for the present.

OTHER PROJECTS

The Council will report in detail in a supplementary report on certain special subjects, that will require current comment, during the Interim Session. Among these are voluntary prepayment medical care plans, union health programs and cash sickness benefits.

STANDARDS OF ACCEPTANCE FOR MEDICAL CARE PLANS

At the 1946 Annual Session the House of Delegates approved the preliminary Standards of Acceptance for Voluntary Prepayment Medical Care Plans as adopted by the Council on Medical Service. At that time, the Council felt that revisions might be desirable from time to time as further information and experience became available.

The Council has constantly maintained that the type and scope of coverage offered by prepayment plans should be subject to the prior approval of constituent and component medical organizations. In keeping with this, it is felt that no one standard should preclude a locally approved or sponsored plan provided that plan met all other standards.

Certain clarifying amendments have been considered and approved by the Council. The total effect is not changed.

The standards as amended now read as follows:

PROPOSED REVISION OF STANDARDS OF ACCEPTANCE FOR MEDICAL CARE PLANS

Development of plans affecting the distribution of medical care, in accordance with the principles adopted by the House of Delegates, is one of the principal functions of the Council on Medical Service. First in importance in the development of plans affecting the provision of medical care is the utilization of the prepayment method to help spread medical and surgical costs.

The Council on Medical Service suggests that special recognition be granted to plans organized and operated in accordance with standards which adequately protect the interest of the public and the medical profession.

In granting this recognition the Council will consider each prepayment medical care plan in the light of established knowledge, authoritative opinion, and according to standards adopted from time to time by the Council in the interest of the public. Plans that conform with the requirements thus formulated will be accepted by the Council.

The prepayment plan may be underwritten either by voluntary prepayment organizations formed specially for the purpose, or by duly licensed private insurance companies, or by both.

Under the conditions defined in the following paragraphs, the Council grants the right to print its seal on all official papers of accepted plans and in any promotional literature or display material used by these plans.

This official seal should appear without comment on its significance unless such comment has been previously approved by the Council. A statement proposed for such use follows: "the seal of acceptance denotes that (name of plan) has been accepted within the standards set forth by the Council on Medical Service of the American Medical Association."

The acceptance of a plan and the seal of the Council are intended to signify that the plan conforms with or meets the following standards or requirements:

Local Approval: 1. The prepayment plan must have the approval of the state medical association or, if local, of the county medical society in whose area it operates. The state association or county society that sponsors the plan, must retain the right to withdraw its approval and require discontinuance of the use of the seal of acceptance on reasonable notice to the public and to the underwriters.

Professional Responsibility: 2. The medical profession should assume responsibility for the medical services included in the benefits; the medical profession is qualified legally and by education to accept responsibility for the character of the medical services rendered.

(*a*) The plan should provide for the appointment of a committee by the medical profession in the area served by the plan; one of the duties of this committee shall be the determination of relative values of medical services and procedures as set forth in the plan's published schedule of benefits. The committee may also be authorized to consider difficulties and complaints and make recommendations.

(*b*) The published schedule of benefits of the plan shall include those services and procedures listed as essential by the Council on Medical Service consistent with the scope of the plan.

Free Choice of Physician: 3. There should be no regulation which restricts free choice of a qualified doctor of medicine in the locality covered by the plan who is willing to give service under the conditions established.

Patient-Physician Relationship: 4. The method of giving the service must retain the personal, confidential relationship between the patient and physician.

Public Policy: 5. The plan should be organized and operated to provide the greatest possible benefits in medical care to the

subscriber. Honesty of purpose and sincere consideration of mutual interests on the part of the subscribers, the physicians and the plans are presupposed as necessary considerations for successful operation.

Type of Benefits: 6. These benefits may be in terms of cash indemnity or medical service. Where benefits are paid in cash to the subscriber it must be clearly stated that these benefits are for the purpose of assisting in paying the charges incurred for medical service and do not necessarily cover the entire cost of medical service, except under specified conditions.

Clarity of Benefits: 7. Subscribers' contracts must state clearly the benefits and conditions under which benefits will be provided. All exclusions, waiting periods, and deductible provisions must be clearly indicated in the promotional literature and in the contracts.

Promotion: 8. Promotional activities must be reasonable without extravagant or misleading statements concerning the benefits to the subscribers. In approving promotional material the Council will endeavor to indicate the type of statements which are acceptable and the nature of those considered objectionable. It is not the function of the Council to edit all copy word for word and sentence for sentence, but rather to indicate the general type of revision required in any given piece of literature. It expects the spirit and intent of such objections to be observed in the remainder of the copy not specifically criticized. Promotional activities will include any devices for informing the public or the profession.

Reports: 9. Each accepted plan must agree to submit reports of financial and enrolment experience in the manner prescribed by the Council.

Safeguards for the Subscriber: 10. The Council will utilize the experience of those plans that are and have been operating successfully as a criterion for judging new plans, but will not discourage experiments in other types of coverage provided such experiments are limited in scope and capable of scientific evaluations. The following principles, however, are laid down as fundamental:

(*a*) The dues from subscribers through premium rates should be adequate to provide for the benefits offered and cover the risks involved.

(*b*) Enrolment practices shall be based on sound actuarial principles such as will not expose the plan to adverse selection. Group enrolment is recommended until experience warrants the acceptance of individuals.

(*c*) It is understood that the plan of organization will conform with state statutes and that the plan will operate on an insurance accounting basis with due consideration for earned and unearned premiums, administrative costs and reserves for contingencies, claims incurred but not paid and unanticipated losses. Each plan must submit reports of financial experience in the manner prescribed by the Council. Supervision should be under the appropriate state authority.

(*d*) Provision should be made for a medical director acceptable to the county or state medical society. The medical director may be paid on a per diem basis for the time involved in handling such matters.

(*e*) All insurance companies participating in the underwriting of a medical society prepayment plan must be licensed to do business in the state in which the plan is located. Inasmuch as the state insurance authorities supervise the finances and underwriting practices of such companies, the Council will duplicate this function only to the extent it deems necessary.

Duration of Acceptance: Acceptance of plans by the Council will be for a period of two years (provided they comply with the standards during this period) or until revoked. At the end of this period all contracts and financial statements shall be reexamined. A shorter period of approval may be granted at the discretion of the Council. Any changes in contracts or literature during the period of acceptance must be submitted to the Council.

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SUGGESTED DEFINITIONS

Methods for improving and for altering the distribution of medical care have been the subject of discussion for many years. These discussions, whether heated debates, partisan declarations or unbiased talks, invariably involve the use of terms the meanings of which are not equally understood by either the listeners or discussants. Even a brief perusal of literature on the subject shows that often the meanings are determined to meet given situations.

Public interest in medical care programs, and therefore in the terms used has reached an all-time high. The American system of medical care is being debated from coast to coast. It is the subject of articles in the leading magazines and of literally thousands of talks and programs.

The Council on Medical Service receives inquiries from all parts of the United States and from all groups of its population. Without exception, the inquiries show confusion as to the meaning of the following terms and the attitude of the American Medical Association toward the methods that these terms involve: socialized medicine; state medicine; sickness insurance; health insurance; compulsory sickness insurance; voluntary medical care insurance; public health; group medical practice; private group clinics, and consumer managed health plans.

In an effort to determine possible definitions of the above terms which might be generally acceptable among the medical profession, the Council has reviewed the books and literature of many authors as well as the actions of the House of Delegates, and has found fairly general agreement on the definitions of all the terms with the exception of the term socialized medicine. The difference of opinion arises in regard to one point and that is whether or not socialized medicine necessarily means government influence or control or whether it merely connotes a form of medical practice in which a method of distributing medical care is made subject to social influences, that is, of groups of persons, the community or the state. Following the opinions of the first group, socialized medicine would be almost synonymous with state medicine. Following the opinions of the second group, socialized medicine would include state medicine, but it would also include the voluntary prepayment plans, sickness insurance, consumer-managed plans, etc.

The term "socialize" according to Webster means "1. To render social, that is, to fit into society; 2. To adapt to social needs or uses such as socializing one's habits, gifts or wealth; 3. To render socialistic in nature or to conform to the theories or practices of socialism." If one accepted either of the first two definitions, then socialized medicine could be used as a general over-all term. However, if one accepts the third definition of Webster, the term socialized medicine might better be limited to government or state medicine. However, in arriving at a set of suggested definitions the Council has leaned primarily on popular usage rather than the dictionary. Most physicians and laymen use the term socialized medicine in referring to government influence or control over medical practice. Rather than try to change the popular conception of the term, the Council has tried to adapt definitions to that conception. Under these definitions, socialized medicine includes state medicine, per se, and compulsory sickness insurance when it is under the direct control of the state. Voluntary sickness insurance is not socialized medicine under the suggested definition nor is group medical practice nor the private group clinics.

The following definitions are submitted to the House of Delegates for consideration:

Socialized Medicine.—Socialized medicine is a system of medical administration by which the government promises or attempts to provide for the medical needs of the entire population or a large part thereof.

State Medicine.—State medicine is a form of socialized medicine in which the government attempts to provide medical services directly to the general population from funds established by taxation. The physicians become employees of the state and medical practice becomes subject to the directives of the third party.

Sickness Insurance.—Sickness insurance is ostensibly a method of transferring the economic burden of sickness from the individual to the group. Sickness insurance may be voluntary or compulsory.

Compulsory Sickness Insurance.—Compulsory sickness insurance is a system of sickness insurance in which all members of a given group of persons in a given governmental area are compelled by law to contribute to and be enrolled in the scheme. Any compulsory sickness insurance program under direct control of the state is socialized medicine, insurance principles no longer prevail and the compulsory contributions become a special tax.

Voluntary Sickness Insurance.—Voluntary sickness insurance is that system whereby individual costs are spread over a period of time by a group of people who voluntarily band together to protect themselves against the economic burden of sickness. It involves the insurance principle and an organized system of payment. It is popularly known as voluntary prepayment medical care insurance.

Public Health.—Public health includes those arrangements whereby the government provides medical services for special groups of persons and undertakes activities which are concerned with the protection of the health of the people as a whole. Public health is concerned with persons requiring institutionalized care, with those who are wards of the government, with the indigent, with proper sanitation, and with the control and prevention of communicable diseases.

Health Insurance.—Health insurance is used interchangeably with sickness insurance and usually means the same thing. It may be voluntary or compulsory, although national health insurance usually means compulsory sickness insurance.

Group Medical Practice.—Group Medical Practice is the application of medical service by a number of physicians working in systematic association with the joint use of equipment and technical personnel and with centralized administration and financial organization.

Private Group Clinics.—The term private group clinics applies to organizations owned and managed by one or more physicians offering medical services. Services are usually supplied by a number of physicians who practice as a group, using joint office facilities and equipment. The physicians are under the supervision of a medical director.

WASHINGTON OFFICE

The special session of Congress adjourned without taking up any matters of importance to the medical profession. During the recess the staff of the Washington office is afforded more time to develop a working liaison with all federal agencies and bureaus dealing with medicine. These agencies welcome the cooperation extended and are very anxious to make available any information desired. As the program progresses, more and more requests to attend public relations and press conferences are received.

At the present time most federal departments are standing by. Few are developing any new policies or plans for several reasons. Outstanding among these is the study being made by the Hoover Commission. The Hoover Commission has begun its monumental task of collating the information it has accumulated. It is expected that out of these surveys, ways to cut the cost of government may be effected. Some of the indicated recommendations to be made include additional assistants to the President, more responsibility placed on the Vice President, an enlarged cabinet to assimilate the scattered agencies and reorganization of the structure of the Veterans Administration and National Military Establishment.

The departments of the Army and the Air Force, through their technical service offices, are developing a large scale promotional plan for recruiting physicians. Their needs seem to be more pressing since the principal responsibility of the draft law has been placed on them.

The department of the Navy has developed a two fold program for the procurement of physicians and dentists—a long range program which involves legislation that must await the new Congress, and a short range plan which is administrative and provides for a series of training and internship plans.

The Public Health Service announced the establishment of the National Heart Institute together with its advisory committee and the National Institute of Dental Health. The institutes will be located in Bethesda, Maryland. The National Advisory Heart Council held an organizational meeting at which time plans were made to lay a broad attack on heart disease, support research and training and aid states in the development of community educational programs. A second meeting will be held some time in December. Unlike other councils, this Council has a lay representation as well as a professional.

The National Cancer Institute announced grants of more than $1,300,000 to finance cancer control and research work in twenty-six states, the District of Columbia, Puerto Rico, Canada and France. The grants were made to forty-six laboratory and clinical research projects, five construction projects, twenty special control projects, nine medical schools to improve cancer teaching courses, and eight dental schools for teaching oral cancer diagnosis. Since the beginning of the program less than a year ago, more than one hundred medical and dental schools have qualified for financial aid. All but twelve of the recognized medical and dental schools are receiving grants from the Cancer Institute.

The Employee Health Program, as provided under Public Law number 659 enacted by the 79th Congress, is well under way with the opening of the first major plan at the Denver Federal Center. Since the beginning of the program surveys have been completed in Denver, Kansas City, Chicago and New Orleans. A survey is now in progress in Boston. In Washington, D. C., there are 125 health units coordinated under this law, some operated through contractual agreement by the Public Health Service and others operated by the individual federal departments.

There are plans in the making to remove certain obstacles of the basic act of the Public Health Service which have been found to be inoperative and administratively unwise. Existing language establishing the various advisory councils of the institutes is to be revised to provide lay representation as well as professional, similar to the councils that were established in conjunction with the heart and dental institutes.

A member of the staff of the Washington office assisted the Bureau of Medical Economic Research in checking statistics used in preparation of one of its reports, and at the request of the Bureau of Legal Medicine and Legislation discussed with the Bureau of Employees' Compensation the feasibility of changing existing law to provide for choice of physician for injured personnel of the federal government. The latter bureau is also being assisted in the collection of information relative to medical service fees and fee schedules paid to civilian physicians by the various government agencies.

Some interesting reports soon to be released, or that have been released recently, are the Gray Report on Civilian Components (the findings of a committee appointed by the Secretary of Defense to make "a comprehensive, objective and impartial study of the reserve forces of the armed forces"), the report of the Civilian Defense Planning Board, and a study which is being conducted by the Technical Services of the Army in conjunction with the Troop Attitude Research on the Medical Department of the Army.

When Mr. Ewing distributed his report to the President, "The Nation's Health," he presented the Washington office with 25 copies from which a copy was mailed to each member of the Council and the Board of Trustees.

Respectfully submitted.

James R. McVay, Chairman
Elmer Hess, Vice Chairman
Jesse D. Hamer
J. D. McCarthy
Thomas A. McGoldrick
H. B. Mulholland
R. L. Sensenich
Walter B. Martin
Edward L. Bortz
George F. Lull
Thomas A. Hendricks, Secretary
Joseph S. Lawrence, Director,
Washington Office.

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CONFERENCE ON NATIONAL MEDICAL PUBLIC RELATIONS

Hotel Statler, St. Louis

SATURDAY, Nov. 27, 1948

Registration: 11:00 a. m.

LUNCHEON SESSION:

GEORGE F. LULL, Chicago, Presiding

12:00 noon. Welcome to Public Relations Delegates.

1:05 p. m. Conference Observations.
LAWRENCE W. REMBER, Chicago.

1:15 p. m. The Public Speaks on Health.
CLAUDE ROBINSON, President, Opinion Research Corporation, Princeton, N. J.

1:45 p. m. Announcements Regarding the Afternoon Workshop Session Topics and Place of Meeting.

PROBLEM CLINIC

WORKSHOP SESSION:

2:00 p. m. Selling the Need for Public Relations to the Medical Profession.
LESTER H. PERRY, Harrisburg, Pa.

2:25 p. m. Using Public Relations to Promote Medical Prepayment Plans.
CHARLES G. HAYDEN, Boston.

2:50 p. m. Setting Up a Workable System for Handling Night Calls.
THEODORE WIPRUD, Washington, D. C.

3:15 p. m. Intermission.

3:30 p. m. The Rebate Problem.
CLEM WHITAKER, San Francisco.

3:55 p. m. How to Develop Good Will with Labor, Farm and Industrial Groups.
C. H. CROWNHART, Madison, Wis.

4:20 p. m. Cooperating with Health Agencies.
HENRY S. JOHNSON, Richmond, Va.

Question and Answer Period will follow each of the above six topics.

4:45 p. m. Five Minute Survey of Workshop Session.

4:50 p. m. Intermission.

SOCIAL AND DINNER SESSION:

ELMER L. HENDERSON, Louisville, Ky., Presiding

5:30 p. m. Cocktails and Entertainment.

6:45 p. m. Dinner at which Special Guests will be Introduced.

8:00 p. m. Summary of Conference Accomplishments.

8:05 p. m. Yes, the Profession Needs PR.
R. L. SENSENICH, South Bend, Ind.

8:10 p. m. What Public Relations Did for Us.
CONGER REYNOLDS, Director of Public Relations, Standard Oil Company of Indiana, Chicago.

9:00 p. m. Adjournment.

ANNUAL CONFERENCE OF STATE SECRETARIES AND EDITORS

Hotel Statler, St. Louis

NOV. 28 AND 29, 1948
SUNDAY, NOV. 28, 1948

9:00 a. m. Registration.

10:00 a. m. Legislation, American Medical Association, State and Government.

11:00 a. m. Osteopathy in Its Relationship to Medicine.

12:00 noon Intermission for Luncheon.

2:00 p. m.—4:30 p. m. Round Table Discussion.
(*a*) Medical Association Radio Programs.
(*b*) Legislation.
(*c*) Prepayment Medical Care Plans.

5:00 p. m. Intermission.

7:00 p. m. Dinner Meeting: "Clinic" on State Medical Journals.
(*a*) Editorial Content.
(*b*) Editorial Format and Makeup.

MONDAY, Nov. 29, 1948

9:30 a. m. General Session.
Roundup on Prepayment Plans.
Ten Minute Reports by Moderators of Round Table Discussions.
Emergency Medical Service.

GRASS ROOTS CONFERENCE

Crystal Room, Jefferson Hotel

TUESDAY, DEC. 1, 7:00 p. m.

A. M. MITCHELL, Terre Haute, Ind., Chairman

7:00 p. m. Registration.

7:30 p. m. Panel I: Relation of the Doctor to National Preparedness.
Guest Speakers to present:
1. The Point of View of the Armed Services.
2. The Point of View of the Medical Profession.
Open Question and Answer Period.

8:45 p. m. Panel II: The Public, the Doctor and "Socialized Medicine."
Guest Speakers to present:
1. Implications of the National Health Assembly and the Ewing Report.
2. Facts from the Brookings Institution Report.
3. Results of European Experiences.
Open Question and Answer Period.

SCIENTIFIC PROGRAM

Municipal Auditorium

TUESDAY, Nov. 30, 1948

GENERAL LECTURES

IN OPERA HOUSE

2:00 p. m. Present Day Status of the Treatment of Hypertension.
IRVINE H. PAGE, Cleveland.

2:30 p. m. The Management of Prolonged Labor.
RALPH REIS, Chicago.

3:00 p. m. Intermission.

CLINICAL PRESENTATIONS

IN ROOM S-1: OBSTETRICS

3:30 p. m. Breech Delivery (Mannikin).
THOMAS M. MIER, St. Louis.

4:00 p. m. The Normal and Abnormal Third Stage of Labor. T. K. BROWN, St. Louis.

4:30 p. m. Roentgen Ray Pelvimetry.
RUSSELL L. NICHOLS, Chicago.

IN ROOM S-2: POLIOMYELITIS

3:30 p. m. The Care of the Poliomyelitis Patient in the Acute Stage.
THOMAS GUCKER III, SHIRLEY COGLAND and THERESA FALLON, The Children's Hospital, Boston.

4:00 p. m. The Care of the Poliomyelitis Patient in the Convalescent Stage.
ROBERT L. BENNETT, HELEN VAUGHN and CHARLOTTE STEITZ, Georgia Warm Springs Foundation, Warm Springs, Ga.

4:30 p. m. The Care of the Poliomyelitis Patient in the Final Rehabilitation Stage.
HOWARD A. RUSK, GEORGE G. DEAVER, DONALD A. COVALT, MILDRED ELSON and BARBARA WHITE, New York University, Department of Rehabilitation and Physical Medicine, New York.

IN ROOM S-3: ARTHRITIS

3:30 p. m. Rheumatoid Arthritis
DONALD F. HILL, Tucson, Ariz.

4:00 p. m. Osteoarthritis EVAN M. BARTON, Chicago.

4:30 p. m. Miscellaneous Rheumatic Diseases.
EDWARD F. ROSENBERG, Chicago.

IN ROOM S-6: CANCER

3:30 p. m. Radical Neck Dissection for Cancer of the Buccal Cavity and Lip.
JAMES B. BROWN and FRANK MCDOWELL, St. Louis.

4:00 p. m. A Radical Operation for Cancer of the Breast.
WILLIAM E. LIGHTON and JOHN S. SCIORTINO, St. Louis.

4:30 p. m. Transvaginal X-Radiation for Cancer of the Uterine Cervix.
A. N. ARNESON and SHERWOOD MOORE, St. Louis.

IN ROOM S-7: ROENTGEN DIAGNOSIS

EDWIN C. ERNST, St. Louis, Presiding

3:30 p. m. The Uses and Abuses of Fluoroscopy with a Discussion of the Interpretation of Chest Films.
IRA H. LOCKWOOD, Kansas City, Mo.

4:00 p. m. Rectal Bleeding and What Should Be Done to Determine Its Cause.
GEORGE M. WYATT, Washington, D. C.

4:30 p. m. Cancer of the Lung: Its Appearance on the X-Ray Film and What Is Necessary to Establish a Diagnosis.
JAMES DOUGLAS, Louisville, Ky.

IN ROOM S-8: LABORATORY DIAGNOSIS

ROBERT A. MOORE, St. Louis, Presiding

3:30 p. m. Renal Function Studies in the Diagnosis of Diseases of the Kidney.
F. WILLIAM SUNDERMAN, Cleveland.

4:00 p. m. The Cytologic Diagnosis of Early Cancer.
JOHN B. FRERICHS, St. Louis.

4:30 p. m. Determination of Prothrombin with Particular Reference to the Use of Anticoagulants in Therapy. E. D. WARNER, Iowa City.

IN ROOM S-10: HYPERTENSION

3:30 p. m. Rehabilitation: Its Place in the Management of Cardiovascular Problems.
HOWARD A. RUSK, New York.

4:00 p m. Cerebral Complications of Hypertension.
G. WILSE ROBINSON, Kansas City, Mo.

4:30 p. m. Peripheral Vascular Disease.
E. V. ALLEN, Rochester, Minn.

There will also be demonstrations from 3:00 p. m. to 5:30 p. m. in the Exhibit on Diabetes in the Scientific Exhibit by Drs. H. F. ROOT, Boston, and W. H. Olmsted, St. Louis.

WEDNESDAY, DEC. 1, 1948

GENERAL LECTURES

IN OPERA HOUSE

9:00 a. m. The Role of the General Practitioner in Child Health Care.
HUGH MCCULLOCH, St. Louis.

9:30 a. m. Diagnosis and Control of Disease.
FRANK W. KONZELMANN, Atlantic City, N. J.

10:00 a. m. Intermission.

IN ASSEMBLY ROOM 1

2:00 p. m. Arthritis.
EDWARD F. ROSENBERG, Chicago.

2:30 p. m. A Résumé of the Skin Diseases That Are Most Commonly Seen in General Practice.
EVERETT C. FOX, Dallas, Texas.

3:00 p. m. Intermission.

CLINICAL PRESENTATIONS

IN ROOM S-1: PEDIATRICS

10:30 a. m. Problem of Nutrition in the Sick Infant.
PETER G. DANIS, St. Louis.

11:00 a. m. Management of the Newborn Infant.
JOSEPH C. JAUDON, St. Louis.

11:30 a. m. Practical Consideration of Mental Health of the Child.
ALFRED S. SCHWARTZ, St. Louis.

12:00 noon. Intermission.

OBSTETRICS

3:30 p. m. Induction of Labor.
MELVIN A. ROBLEE, St. Louis.

4:00 p. m. Dystocia Due to Pelvic Neoplasms.
SIM B. LOVELADY, Rochester, Minn.

4:30 p. m. Treatment of Asphyxia of the Newborn.
JOSEPH A. MCNEARNEY, St. Louis.

IN ROOM S-2: POLIOMYELITIS

10:30 a. m. The Care of the Poliomyelitis Patient in the Acute Stage.
THOMAS GUCKER III, SHIRLEY COGLAND and THERESA FALLON, The Children's Hospital, Boston.

11:00 a. m. The Care of the Poliomyelitis Patient in the Convalescent Stage.
ROBERT L. BENNETT, HELEN VAUGHN and CHARLOTTE STEITZ, Georgia Warm Springs Foundation, Warm Springs, Ga.

11:30 a. m. The Care of the Poliomyelitis Patient in the Final Rehabilitation Stage.
HOWARD A. RUSK, GEORGE G. DEAVER, DONALD A. COVALT, MILDRED ELSON and BARBARA WHITE, New York University, Department of Rehabilitation and Physical Medicine, New York.

12:00 noon. Intermission.

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HOWARD A. RUSK, GEORGE G. DEAVER, DONALD A. COVALT, MILDRED ELSON and BARBARA WHITE, New York University, Department of Rehabilitation and Physical Medicine, New York.

IN ROOM S-3: DIABETES

10:00 a. m. Management of the Newly Discovered Diabetic Patient.
E. PAUL SHERIDAN, Denver.

10:30 a. m. Control of Juvenile Diabetics.
JULIAN D. BOYD, Iowa City.

11:00 a. m. Medical Problems in Surgical Diabetics.
HOWARD F. ROOT, Boston.

11:30 a. m. Transmetatarsal Amputations.
L. S. MCKITTRICK, Boston.

1:00 p. m. Intermission.

12:00 noon. Insulin Resistance.
I. A. MIRSKY, Cincinnati.

12:30 p. m. Difficulties in the Use of Insulin.
H. B. MULHOLLAND, Charlottesville, Va.

3:00 p. m. Adjustment of Diet and the Newer Insulins.
F. B. PECK, Indianapolis.

3:30 p. m. Insulin Mixtures.
CYRIL M. MACBRYDE, St. Louis.

4:00 p. m. Insulin Dosage in Severe Cases.
LEON S. SMELO, Birmingham, Ala.

4:30 p. m. Diabetic Neuritis.
RALPH W. RUNDLES, Durham, N. C.

IN ROOM S-6: DERMATOLOGY

RICHARD S. WEISS, St. Louis, Presiding

10:30 a. m. Ringworm Infections of the Skin.
JOHN E. DALTON, Indianapolis.

11:00 a. m. The So-Called Precancerous Lesions of the Skin. M. F. ENGMAN, JR., St. Louis.

11:30 a. m. Carcinoma of the Skin.
M. D. MARCUS, St. Louis.

12:00 noon. Intermission.

CANCER

3:30 p. m. Clinical Evaluation of the Newer Methods of Radium Therapy in Cancer of the Uterine Cervix.
EDWIN C. ERNST, St. Louis.

4:00 p. m. Bronchogenic Carcinoma.
E. A. GRAHAM and THOMAS H. BURFORD, St. Louis, and LAUREN ACKERMAN, Columbia, Mo.

4:30 p. m. Diagnosis of Cancer of the Head and Neck.
LOUIS H. JORSTAD, St. Louis.

IN ROOM S-7: ROENTGEN DIAGNOSIS

JOSEPH C. PEDEN, St. Louis, Presiding

10:30 a. m. The X-Ray Diagnosis of Arthritis and of Bone Tumors. R. T. LEVIN, Indianapolis.

11:00 a. m. Pulmonary Tuberculosis: The Clinical Significance of Microfilm Surveys.
THEODORE F. HILBISH, Washington, D. C.

11:30 a. m. The Diagnosis of Pulmonary Tuberculosis in Early Moderately Advanced and Advanced Stages: Its Appearance on Chest Films.
LEROY SANTE, St. Louis.

12 noon. Intermission.

3:30 p. m. X-Ray Diagnosis of Cardiovascular Diseases.
RAYMOND R. LANIER, Chicago.

4:00 p. m. Congenital Heart Disease: The Importance of Determining Its Type by Angiography.
WENDELL G. SCOTT, St. Louis.

4:30 p. m. Myelography: Its Indications and Diagnostic Significance.
JOHN D. CAMP, Rochester, Minn.

IN ROOM S-8: LABORATORY DIAGNOSIS

FRANK W. KONZELMANN, Atlantic City, N. J., Presiding

10:30 a. m. Renal Function Studies in the Diagnosis of Diseases of the Kidney.
F. WILLIAM SUNDERMAN, Cleveland.

11:00 a m. The Cytologic Diagnosis of Early Cancer.
JOHN B. FRERICHS, St. Louis.

11:30 a. m. Determination of Prothrombin with Particular Reference to the Use of Anticoagulants in Therapy. E. D. WARNER, Iowa City.

12:00 noon. Intermission.

HENRY PINKERTON, St. Louis, Presiding

3:30 p. m. Histoplasmosis.
PARKER R. BEAMER, St. Louis.

4:00 p. m. The Differential Diagnosis of Jaundice by Laboratory Methods.
FRANK W. KONZELMANN, Atlantic City, N. J.

4:30 p. m. Hypoglycemic and Hyperglycemic States.
PAUL CUTLER, Atlantic City, N. J.

IN ROOM S-10: HEMATURIA

A. N. ARNESON, St. Louis, Presiding

10:30 a. m. Common Causes of Hematuria.
EDWIN DAVIS, Omaha, and L. W. LEE, Denver.

11:00 a. m. Consideration of the Cause of Hematuria from the General Practitioner's Standpoint.
NORRIS J. HECKEL, Chicago.

11:30 a. m. Cystoscopic Examination: Its Importance and Necessity.
H. FAY H. JONES, Little Rock, Ark.

HEART

3:30 p. m. Diagnosis and Treatment of Cardiac Neurosis.
GILBERT H. MARQUARDT, Chicago.

4:00 p. m. Therapy of Chronic Coronary Disease.
ROBERT S. BERGHOFF, Chicago.

4:30 p. m. Management of Rheumatic Heart Disease.
A. GRAHAM ASHER, Kansas City, Mo.

THURSDAY, DEC. 2, 1948

GENERAL LECTURES

IN OPERA HOUSE

9:00 a. m. Hematuria. CYRUS E. BURFORD, St. Louis.

9:30 a. m. The Clinical Significance of Jaundice.
SIDNEY A. PORTIS, Chicago.

10:00 a. m. Intermission.

2:00 p. m. The Diagnosis and Early Treatment of Poliomyelitis.
THOMAS GUCKER III, Boston.

2:30 p. m. Myocardial Insufficiency and Its Management.
GEORGE R. HERRMANN, Galveston, Texas.

CLINICAL PRESENTATIONS

IN ROOM S-3: PEDIATRICS

10:30 a. m. Management of Congenital Heart Disease.
MERL J. CARSON, St. Louis.

11:00 a. m. Parenteral Fluid Therapy in Children.
GILBERT B. FORBES, St. Louis.

11:30 a. m. Recent Advances in the Care of the Premature Infant.
JACKSON K. ETO, St. Louis.

12:00 noon. Intermission.

OBSTETRICS

3:30 p. m. Low and Outlet Forceps (Mannikin).
ROY V. BROEDEKER, St. Louis.

4:00 p. m. Modern Concepts in Management of Heart Disease and Pregnancy.
WILLIS E. BROWN, Iowa City.

4:30 p. m. Emergency Treatment of Antepartum Hemorrhage. CARL P. HUBER, Indianapolis.

IN ROOM S-2: POLIOMYELITIS

10:30 a. m. The Care of the Poliomyeltis Patient in the Acute Stage.
THOMAS GUCKER III, SHIRLEY COGLAND and THERESA FALLON, The Children's Hospital, Boston.

11:00 a. m. The Care of the Poliomyelitis Patient in the Convalescent Stage.
ROBERT L. BENNETT, HELEN VAUGHN and CHARLOTTE STEITZ, Georgia Warm Springs Foundation, Warm Springs, Ga.

11:30 a. m. The Care of the Poliomyelitis Patient in the Final Rehabilitation Stage.
HOWARD A. RUSK, GEORGE G. DEAVER, DONALD A. COVALT, MILDRED ELSON and BARBARA WHITE, New York University, Department of Rehabilitation and Physical Medicine, New York.

12:00 noon. Intermission.

3:30 p. m. The Care of the Poliomyelitis Patient in the Acute Stage.
THOMAS GUCKER III, SHIRLEY COGLAND and THERESA FALLON, The Children's Hospital, Boston.

4:00 p. m. The Care of the Poliomyelitis Patient in the Convalescent Stage.
ROBERT L. BENNETT, HELEN VAUGHN and CHARLOTTE STEITZ, Georgia Warm Springs Foundation, Warm Springs, Ga.

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HOWARD A. RUSK, GEORGE G. DEAVER, DONALD A. COVALT, MILDRED ELSON and BARBARA WHITE, New York University, Department of Rehabilitation and Physical Medicine, New York.

IN ROOM S-3: DIABETES

10:00 a. m. Diagnosis of Diabetes.
JOSEPH C. EDWARDS, St. Louis.

10:30 a. m. Coronary Disease in Middle Age.
O. P. J. FALK, St. Louis.

11:00 a. m. Surgery and Diabetic Management.
C. C. COGGESHALL, Chicago.

11:30 a. m. Rapid Blood Sugar Method.
H. L. C. WILKERSON, Boston.

12:00 noon. Hypoglycemia.
C. W. STYRON, Raleigh, N. C.

12:30 p. m. Treatment of Gangrene.
C. C. FRANSEEN, Newton Centre, Mass.

1:00 p. m. Intermission.

3:00 p. m. Coma. H. F. ROOT, Boston.

3:30 p. m. Pregnancy.
T. P. SHARKEY, Dayton, Ohio.

4:00 p. m. Lipotrophic Substances.
G. O. BROUN, St. Louis.

4:30 p. m. Nocturnal Diarrhea.
WAYNE O. GORLA, St. Louis.

IN ROOM S-6: DERMATOLOGY

GAROLD V. STRYKER, St. Louis, Presiding

10:30 a. m. Acne Vulgaris.
NORMAN TOBIAS, St. Louis.

11:00 a. m. Vitamin Deficiency.
JOSEPH GRINDON JR., St. Louis.

11:30 a. m. Pus Infections of the Skin.
HYMAN G. GOLDMAN, St. Louis.

12:00 noon. Intermission.

CANCER

3:30 p. m. Diagnosis of Carcinoma of the Face and Eyelids. CHARLES F. SHERWIN, St. Louis.

4:00 p. m. Surgical Pathology of the Alimentary Tract.
J. W. THOMPSON, St. Louis.

4:30 p. m. Radioactive Phosphorus Therapy of Chronic Leukemia.
EDWARD H. REINHARD, St. Louis.

IN ROOM S-7: JAUNDICE

10:30 a. m. Portal Cirrhosis.
G. O. BROUN, St. Louis.

11:15 a. m. Homologous Serum Jaundice.
BRUCE D. KENAMORE, St. Louis.

12:00 noon. Intermission.

3:30 p. m. Cancer of Hepatic Ducts and Portal Thrombosis as a Cause of Jaundice.
BARRETT L. TAUSSIG, St. Louis.

4:15 p. m. Infectious Hepatitis.
HAROLD SCHEFF, St. Louis.

IN ROOM S-8: LABORATORY DIAGNOSIS

HOLLIS N. ALLEN, St. Louis, Presiding

10:30 a. m. Histoplasmosis.
PARKER R. BEAMER, St. Louis.

11:00 a. m. The Differential Diagnosis of Jaundice by Laboratory Methods.
FRANK W. KONZELMANN, Atlantic City, N. J.

11:30 a. m. Hypoglycemic and Hyperglycemic States.
PAUL CUTLER, Atlantic City, N. J.

12:00 noon. Intermission.

SAM GRAY, St. Louis, Presiding

3:30 p. m. The Leukocyte in Disease.
GUSTAVE J. DAMMIN, St. Louis.

4:00 p. m. The Red Blood Cell in Anemia.
ARTHUR H. SANFORD, Rochester, Minn.

4:30 p. m. The Spinal Fluid in Disease.
R. O. MUETHER, St. Louis.

IN ROOM S-10: HEMATURIA

E. L. KEYES, St. Louis, Presiding

10:30 a. m. Radiographic Studies.
R. LEE HOFFMANN, Kansas City, Mo.

11:00 a. m. Lower Urinary Tract Lesions Producing Hematuria.
THOMAS MOORE, Memphis, Tenn.

11:30 a. m. Upper Urinary Tract Lesions Producing Hematuria. ELMER HESS, Erie, Pa.

12:00 noon. Intermission.

HEART

3:30 p. m. Nutritional Factors in Chronic Cardiovascular Disease.
TOM D. SPIES, Birmingham, Ala., and ROBERT S. STONE, San Francisco.

4:00 p. m. Management of the Hypertensive Heart.
GEORGE R. HERRMANN, Galveston, Texas.

4:30 p. m. Anticoagulant Therapy in Coronary Occlusion. E. STERLING NICHOL, Miami, Fla.

FRIDAY, DEC. 3, 1948

GENERAL LECTURES

IN OPERA HOUSE

9:00 a. m. Cancer. C. P. RHOADS, New York.

9:30 a. m. Diabetes. E. P. JOSLIN, Boston.

CLINICAL PRESENTATIONS

IN ROOM S-1: PEDIATRICS

10:30 a. m. Practical Consideration of the Endocrine Problem of Childhood.
MAX DEUTCH, St. Louis.

11:00 a. m. Recent Advances in Immunization Procedures. JEAN V. J. COOKE, St. Louis.

11:30 a. m. Points in Diagnostic Pediatric Radiology.
DON C. WEIR, St. Louis.

IN ROOM S-2: POLIOMYELITIS

10:30 a. m. The Care of the Poliomyelitis Patient in the Acute Stage.
THOMAS GUCKER III, SHIRLEY COGLAND and THERESA FALLON, The Children's Hospital, Boston.

11:00 a. m. The Care of the Poliomyelitis Patient in the Convalescent Stage.
ROBERT L. BENNETT, HELEN VAUGHN and CHARLOTTE STEITZ, Georgia Warm Springs Foundation, Warm Springs, Ga.

11:30 a. m. The Care of the Poliomyelitis Patient in the Final Rehabilitation Stage.
HOWARD A. RUSK, GEORGE G. DEAVER, DONALD A. COVALT, MILDRED ELSON and BARBARA WHITE, New York University, Department of Rehabilitation and Physical Medicine, New York.

IN ROOM S-3: ARTHRITIS

10:30 a. m. Rheumatoid Arthritis.
DONALD F. HILL, Tucson, Ariz.

11:00 a. m. Rheumatoid Spondylitis.
CHARLES J. SMYTH, Eloise, Mich.

11:30 a. m. Gout.
HOWARD F. POLLEY, Rochester, Minn.

IN ROOM S-6: DERMATOLOGY

A. W. CONRAD, St. Louis, Presiding

10:30 a. m. Contact Dermatitis.
W. A. SHOWMAN, Tulsa, Okla.

11:00 a. m. Psoriasis and Seborrhea.
ROY L. KILE, Cincinnati.

11:30 a. m. Lupus Erythematosis.
JOHN H. LAMB, Oklahoma City.

IN ROOM S-7: JAUNDICE

10:30 a. m. Liver Biopsies.
W. A. KNIGHT, St. Louis.

11:15 a. m. Summary of Clinical Presentations.
SIDNEY A. PORTIS, Chicago.

IN ROOM S-8: LABORATORY DIAGNOSIS

JOHN A. SAXTON, St. Louis, Presiding

10:30 a. m. The Leukocyte in Disease.
GUSTAVE J. DAMMIN, St. Louis.

11:00 a. m. The Red Blood Cell in Anemia.
ARTHUR H. SANFORD, Rochester, Minn.

11:30 a. m. The Spinal Fluid in Disease.
R. O. MUETHER, St. Louis.

IN ROOM S-10: HEMATURIA

LOUIS H. JORSTAD, Presiding

10:30 a. m. Treatment of Hematuria Associated with Infection.
WILLIAM N. WISHARD JR., Indianapolis.

11:00 a. m. Hematuria Associated with Stone and Obstruction.
ROY B. HENLINE, New York.

11:30 a. m. Hematuria Associated with Tumor.
JAMES C. SARGENT, Milwaukee.

There will also be demonstrations from 10:00 a. m. to 12:00 noon in the Exhibit on Diabetes in the Scientific Exhibit by Drs. Elliott P. Joslin and Allen P. Joslin, Boston, and Daniel L. Sexton, St. Louis.

TELEVISION

TUESDAY, NOV. 30, 1948

2:00 p. m.— 3:15 p. m. Medical Clinic, Firmin Desloge Hospital.

3:15 p. m.— 4:00 p. m. Operative Clinic, Firmin Desloge Hospital.

WEDNESDAY, DEC. 1, 1948

9:30 a. m.—12:00 noon. Operative Clinic, St. Mary's Hospital.

2:00 p. m.— 3:15 p. m. Medical Clinic, St. Mary's Hospital.

3:15 p. m.— 4:00 p. m. Operative Clinic, St. Mary's Hospital.

THURSDAY, DEC 2, 1948

9:30 a. m.—12:00 noon. Operative Clinic, Barnes Hospital.

2:00 p. m.— 4:00 p. m. Operative Clinic, Barnes Hospital.

FRIDAY, DEC 3, 1948

9:30 a. m.—12:00 noon. Medical Clinic, Barnes Hospital.

ENTERTAINMENT AT THE ST. LOUIS SESSION

An unusual feature of the St. Louis session is an evening devoted entirely to entertainment with an exceptional program.

Physicians registered at the session, their wives and members of their families will be admitted. Admission will be exclusively by ticket. Tickets will be issued at the time of registration.

The entertainment will be several hours in length. People will not be seated after the program once begins. It is scheduled to begin at 7:30 p. m.

The distinguished cast of entertainers are being flown from Hollywood and New York especially for this program and will leave St. Louis immediately thereafter.

The program will include:

***Bob Hawk*, Master of Ceremonies and Quizmaster, and *Vaughn Monroe* and his orchestra from New York.**

***Red Foley*, *Minnie Pearl* and *Rod Brasfield* from Nashville, Tenn.**

***Jimmy Durante* and *Allan Young* from Hollywood, Calif.**

THE SCIENTIFIC EXHIBIT

The Scientific Exhibit will be located in the Main Exhibition Hall of Kiel Auditorium (St. Louis Public Auditorium), adjacent to the general registration desks, the technical exhibit and the clinical presentations.

Exhibits pertaining to the clinical presentations will be grouped in front of each of the clinical rooms.

The Scientific Exhibit will open Tuesday noon, November 30, and will close at 12:00 noon, Friday, December 3.

Committee on Scientific Exhibit.
DWIGHT H. MURRAY, Chairman
E. J. MCCORMICK
GUNNAR GUNDERSEN
MORRIS FISHBEIN, ex officio
GEORGE F. LULL, ex officio
THOMAS G. HULL, Director

IRENE A. KOENEKE, V. E. CHESKY, G. A. WESTFALL, L. E. PECKENSCHNEIDER and THOMAS L. FOSTER, The Hertzler Research Foundation, Halstead, Kan.:

Conservative Pelvic Surgery in the Female: Moulages show circulation of the female pelvis and maintenance of this circulation in conservative operations on the uterus and ovaries. The relation of genital and urinary problems is presented, based on the symptoms and observations in 1,000 cystoscopic examinations on the female. The effect of castration and the accompanying psychiatric problems are depicted.

LEO J. HARTNETT, St. Louis University School of Medicine, St. Louis:

Arterial Visualization of the Placental Site: Aortography offers a method of directly visualizing the maternal circulation over the placental site. This exhibit demonstrates the placental location through the use of roentgenograms. The entire operative procedure is shown by posters, including indications, contraindications and complications. Roentgen evidence of some complications is shown also.

NATIONAL FOUNDATION FOR INFANTILE PARALYSIS, INC., New York, with the assistance of the Georgia Warm Springs Foundation, Warm Springs, Ga.:

Treatment of Poliomyelitis: The seven stages of treatment of poliomyelitis are shown: (1) save patient's life, (2) prepare for motion, (3) coordinate function and increase strength, (4) increase functional activity, (5) evaluate functional capacity, (6) return home and (7) orthopedic surgery and assistive appliances. Clinical demonstrations will be carried on in an area adjoining the exhibit.

PAUL F. FLETCHER, St. Louis University School of Medicine, St. Louis:

Abdominal Colpo-Cystopexy for Complete Prolapse of Vagina, Bladder and Uterus—Rectus Suspension Principle of Crossed-Suspender Support: The exhibit presents the rectus suspension principle of operative treatment for complete prolapse of the bladder and vagina following hysterectomy and for selected cases of complete uterine procidentia. Living fascial strips mobilized from the anterior rectus sheaths are employed in such a manner as to effect permanent restoration of normal anatomic relationships of these viscera in the pelvis. Analysis of results obtained in both types of cases based on follow-up observations for periods of two to eight years are included.

HUGH L. C. WILKERSON, MALCOLM J. FORD and DONALD HARTING, U. S. Public Health Service, Diabetes Section, Boston:

Simplified Case Finding in Diabetes Control: New developments in diabetes case finding are presented, with a new rapid screening blood glucose test. Blood sugar values on 2,000 "normal" persons from Brookline, Mass., are shown, and the relation to time elapsed since the last meal is indicated. A study of the incidence of diabetes in relatives of a known group of diabetic persons in Jacksonville, Fla., is presented. Physicians are invited to have screening blood glucose tests or they may actually perform the tests themselves.

HOWARD F. ROOT, ELLIOTT P. JOSLIN, PRISCILLA WHITE, ALEXANDER MARBLE, ALLEN P. JOSLIN and HERBERT H. MARKS, George F. Baker Clinic, New England Deaconess Hospital and Metropolitan Life Insurance Company, Boston and New York:

Diabetes Mellitus in Camp, Home and Hospital: Placards present information about new diabetes camps for children, treatment of diabetes complicated by pregnancy, coma and surgical treatment and new data on factors influencing mortality rates.

HUGH L. C. WILKERSON, Diabetes Section, U. S. Public Health Service, JOSEPH H. BARACH and FRANK N. ALLAN, Boston and B. Y. GLASSBERG, St. Louis, American Diabetes Association:

Diabetes in the United States: The activities of the American Diabetes Association in helping physicians and patients to meet the problems of diabetes are presented. The results of the diabetes program of the U. S. Public Health Service are demonstrated, with statistics on the incidence of diabetes as revealed by the case finding study in Oxford, Mass.

WILLIAM S. COLLENS, NATHAN D. WILENSKY, LOUIS C. BOAS, JAMES D. ZILINSKY and JEROME J. GREENWALD, Maimonides Hospital, Brooklyn:

Complications of Diabetes Mellitus: The exhibit consists of color prints and charts depicting the following complications of diabetes mellitus; insulin lipoatrophy, lipohypertrophy, peripheral neuropathy, Kimmelstiel-Wilson syndrome, acute arterial thrombosis, varieties of gangrene, xanthromatoses and vitamin deficiency states. The diagnostic and therapeutic aspects of these conditions are stressed.

DONALD F. HILL, W. PAUL HOLBROOK, CHARLES A. L. STEPHENS JR., LEO J. KENT and EDNA McCARTHY, Tucson, Ariz.:

Treatment of Rheumatoid Arthritis: The treatment of rheumatoid arthritis is presented with basic outline, optional, doubtful and worthless methods. Emphasis is given to prevention and correction of deformity with pictures, roentgenograms, charts and demonstrations. Special attention to knee contractions and correction with manipulation in approximately 70 cases is included.

R. S. HENCH, R. K. GHORMLEY and E. F. ROSENBERG,* Mayo Clinic, Rochester, Minn.:

Types of Rheumatic Diseases: The exhibit presents a summary of the pathologic features together with characteristic clinical and roentgenologic changes of the commoner rheumatic diseases, such as rheumatoid arthritis, gout, gonorrheal and other specific arthritides, fibrositis, hypertrophic arthritis, Heberden's nodes, Charcot's joints, tuberculous arthritis and osteochondromatosis. Each type of disease is illustrated by means of clinical photographs, roentgenograms, histologic preparations and moulages.

HOWARD F. POLLEY and DONALD J. ERICKSON, Mayo Clinic, Rochester, Minn.:

Physical Medicine in Arthritis: This exhibit deals with the employment of physical procedures for rehabilitation of persons having arthritis.

WILLIS E. BROWN, OTTO F. KRAUSHAAR and J. T. BRADBURY, State University of Iowa, Iowa City:

Cytology in the Detection of Cancer—Results of a Survey in 4,000 Women Over 30 Years of Age: The exhibit contains six panels of transilluminated Kodachrome photomicrographs of normal and cancer cells in smears stained by the Papanicolaou

* Fellow in Medicine at the Mayo Foundation from Oct. 1, 1935 to June 1, 1942.

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technic. In addition to adenocarcinomas and epidermoid carcinomas of the cervix and uterus, examples of pulmonary and renal malignant growths are also included. The summary of a survey of about 4,000 vaginal smears is presented in graphic form. It is presented to show the correlation of cytologic observations with those of biopsy specimens and clinical examinations.

CHARLES F. SHERWIN, St. Louis University School of Medicine, St. Louis:

Tumor of the Face and Eyelids: Photographs and transparencies of various common and unusual tumors and allied conditions noted about the face and eyelids with notations as to treatments and after-results. Special emphasis will be given to types of lesions that could easily be managed by the general practitioner who does a moderate amount of surgical work.

CHARLES F. SHERWIN and ASSOCIATES, Cancer Control Committee, St. Louis University School of Medicine, St. Louis:

Typical 5-Year Survivors of Histologically Proven Cancer—Illustrative Case Reports: Seven case histories are given, together with photographs and photomicrographs as follows:

Case 1.—*Melanoma of Conjunctiva with Preauricular Metastases:* EDWIN J. CASEY, LEGRAND D. SPENCER and CHARLES F. SHERWIN.

CASE 2.—*Carcinoma of Cervix Uteri.* W. VOGT Sr. and LEROY SANTE.

Case 3.—*Carcinoma of Skin About Ear.* CHARLES F. SHERWIN.

Case 4.—*Carcinoma of the Rectum.* W. K. MCINTYRE and R. J. MCGANN.

Case 5.—*Carcinoma of the Stomach.* L. RASSIEUR and L. T. MOORE.

Case 6.—*Carcinoma of the Lower Lip.* G. V. STRYKER.

Case 7.—*Carcinoma of the Breast.* W. E. LEIGHTON, L. T. MOORE and J. ERNEST JENSEN.

EDWIN C. ERNST, Barnard Free Skin and Cancer and DePaul Hospitals, St. Louis:

Improved Radium Technic in the Treatment of Carcinoma of the Cervix—Preliminary Clinical Results Compared and Analyzed: The advantages of uniform distribution of multiple sources of radium in the treatment of carcinoma of the cervix are illustrated by means of Kodachrome reproductions of actual cervical lesions during various stages of treatment and variable dosages. Recently developed radium measurement charts and graphs further illustrate the need for improved distribution and more accurate dosage application methods. The clinical application of various radium methods is illustrated and the respective clinical results shown on Kodachrome photographs before and after radium therapy procedures.

STANLEY E. LAWTON, CHARLES E. FILDES, LEON SEIDMAN and ROBERT SCHREK, University of Illinois College of Medicine and Hines Hospital, Chicago:

Cancer of the Stomach: The exhibit emphasizes the extreme importance of early diagnosis and early treatment of carcinoma of the stomach. It depicts by use of charts, drawings, roentgenograms and pathologic specimens the results of a study of 1,004 cases admitted from many different states. Difficulties of early diagnosis are pointed out and methods evaluated, and the great responsibility for employment of every possible diagnostic means by the first physician who sees the patient is stressed.

FREDERICK H. FALLS, University of Illinois College of Medicine and CHARLOTTE S. HOLT, Illinois State Department of Public Health, Chicago:

Carcinoma of the Uterus: Charts, models, drawings and graphs depict carcinoma of the cervix and body of the uterus. Particular emphasis is placed on the pathologic aspects, gross and microscopic, and on the associated pathologic aspects. Etiologic factors are pointed out and diagnostic procedures for the detection of early carcinoma are described. Methods of treatment are shown, together with statements concerning the results of such treatment.

NATIONAL CANCER INSTITUTE, Bethesda, Md.:

Environmental Cancer: The exhibit includes a four unit display showing causes and control of environmental cancer. (1) Some Causes of Cancer Are Known—a diagrammatic section through the human body, showing 11 organs and 7 carcinogenic factors affecting them and four routes of exposures. (2) Varied Aspects of Environmental Cancer—including radioactive substances and x-rays as variation by type of contact; hydrocarbons as variation by occupation and solar rays as variation by level of intensity. (3) Case History: Aromatic Amines in a Dye Plant—showing factory with carcinogenic focus and figurines in plastic, showing percentage of cancer in carcinogenic operation, department, , ant, county and state and (4) Control of Environmental Cancer—illustrating six control factors of environmental cancer.

EVARTS A. GRAHAM, THOMAS H. BURFORD and LAUREN A. ACKERMAN, Washington University School of Medicine, St. Louis:

Bronchiogenic Carcinoma: The exhibit illustrates frequency and types of bronchiogenic carcinoma. Methods used in diagnosis and treatment are shown and modern results are indicated.

A. C. CHRISTIE, FRED O. COE, A. O. HAMPTON and GEORGE M. WYATT, Washington, D. C.:

Rectal Bleeding—Polyps and Early Carcinoma of the Colon: The exhibit shows that (1) the discovery of polyps of the colon is dependent on proctoscopy, sigmoidoscopy and roentgen examition; (2) bleeding from the bowel even as a single episode may indicate the presence of a polyp or carcinoma and must be explained; (3) the barium sulfate enema examination necessary to disclose the cause of bleeding from the bowel must be carried out with painstaking thoroughness. The following steps are necessary: (*a*) fluoroscopy with palpitation and preevacuation roentgenograms, (*b*) compression spot roentgenograms of suspected area, (*c*) the addition of tannic acid to the barium sulfate enema (2 per cent by weight in the water), (*d*) good postevacuation roentgenograms to show mucosal relief of the contracted colon and (*e*) repetition of an unproductive examination must be done until the origin of bleeding is demonstrated or the normal anatomy of the entire colon is shown. A polyp removed is a cancer prevented.

LOUIS H. JORSTAD and EMMETT B. DRESCHER, St. Louis:

Diagnosis and Treatment of Cancer of the Head and Neck Region: Photographs emphasize the diagnostic features of cancer as it occurs in the head and neck region, with emphasis as to form of treatment and follow-up results. Particular regions emphasized are eyelids, ears, nose, lip, buccal mucosa and tongue.

JAMES BARRETT BROWN, FRANK MCDOWELL and MINOT P. FRYER, Washington University School of Medicine, St. Louis:

Neck Dissection for Metastatic Carcinoma: Colored illustrations of the operation for complete neck dissection are shown with explanatory charts.

E. LAWRENCE KEYES and HENRY PINKERTON, St. Louis University, Cancer Control Program, St. Louis:

Three Unusual Tumors of Clinico-Pathologic Interest—A. Lymphangitic Carcinoma of Lung; B. Plasmocytoma of Thyroid; C. Chordoma of Sella Turcica: The exhibit presents the clinical, radiologic and pathologic aspects of 3 recent cases, chosen for their general interest. In addition to the visual presentation, a brief discussion of each tumor will be given and the prognosis and treatment outlined.

J. WILLIAM THOMPSON and E. L. MILOSLAVICH, DePaul Hospital, St. Louis:

Surgical Pathology—Gastrointestinal Tract: The exhibit consists of gross specimens of malignant lesions of the gastro-

intestinal tract, surgically removed, mounted and prepared by an original method using a colored background with indirect illumination.

AMERICAN CANCER SOCIETY, Missouri Division, Jefferson City, Mo.:

Public Education in Cancer—How Your Doctor Detects Cancer: The central theme of the exhibit demonstrates how the practicing physician detects cancer by the employment of the senses of the sight, hearing and touch. One section of the exhibit will emphasize the three methods of treating cancer—with roentgen ray, operation and radium. One panel is devoted to the hope of cure.

BREWSTER S. MILLER, American Cancer Society, Inc., New York:

Professional Education in Cancer: Illustrations depict many of the activities of the professional education section of the American Cancer Society, including the Society's new journal, *Cancer*, illustrated lantern slide library, lending library of professional films, the Society's exhibit program and fellowship program, monographs on the early recognition of cancer of various sites, a new film illustrating the general practitioner's responsibility and opportunities in cancer control, the Society's participation in various medical meetings and the library's function in professional education, as current literature, cancer bibliography and topical bibliographies.

ALBERT KUNTZ, WILLIAM F. ALEXANDER, CALVIN A. RICHINS, NORMAN M. SULKIN and WILLIAM P. HENDERSON, St. Louis University School of Medicine, St. Louis:

Autonomic Nervous System: The exhibit is divided into three parts: (A) The anatomic relationships of the sympathetic trunks and the communicating rami are illustrated by drawings made from dissections of human cadavers and in anatomic preparations. The significance of certain normal anatomic relationships and some common variations in relation to sympathectomy is pointed out. (B) The responses of the smaller blood vessels in the intestine and other viscera to localized warm and cold stimulation of the skin are illustrated as observed in sections prepared by the freeze-dry technic. The cutaneovisceral reflex arcs concerned in these responses are illustrated diagrammatically. (C) The histologic structure of the autonomic ganglia is illustrated in photomicrographs with particular reference to the neuroglial supporting tissue. Individual ganglion cells are illustrated photomicrographically to show the chromidial substance, the Golgi apparatus, the ascorbic acid content, etc.

VERONICA L. CONLEY, Joint Committee on Cosmetics, American Medical Association, Chicago:

Cosmetic Dermatitis: The exhibit presents common causative agents, diagnostic aids, treatment and prognosis in cosmetic dermatitis. Illustrations consist of transparencies and photographs depicting dermatoses acquired from various cosmetics.

CLEVELAND J. WHITE, CHARLES S. GILBERT and FRED R. SCHWARTZ, Stritch School of Medicine of Loyola University, Chicago:

The Positive Wassermann—Its Clinical Interpretation: A positive Wassermann reaction may mean clinical syphilis. It may confirm the diagnosis of suspected syphilis. At least forty-two other diseases, both dermatologic and internal syndromes, may present a positive serologic reaction. Charts, drawings and posters show exactly how such a reaction can be definitely clinically interpreted.

MORRIS MOORE, The Barnard Free Skin and Cancer Hospital, St. Louis:

Mycotic Infections: The exhibit presents a clinical and mycologic classification of the pathogenic fungi of man. Clinical photographs and photomicrographs illustrate both the infections in man, the appearance of the causative fungi in their parasitic state and the pathologic processes that they induce. Charts show the relationships in a schematic arrangement of the various mycoses. Cultures of the fungi in Petri dishes demonstrate their appearance in a saprophytic state; Kodachromes of some of the cultures and histopathologic sections are shown.

LESTER M. MORRISON, College of Medical Evangelists, Los Angeles County General Hospital, Los Angeles:

Alcohol and the Liver—Effects and Treatment: The results of eight years' investigation of the clinical and pathologic changes in the liver resulting from an abnormal intake of ethyl alcohol are presented. Histologic changes in the liver, as secured by punch biopsy before and after treatment, are shown. The results of treatment by various new lipotropic agents, such as a new choline carbonate, a new liver extract and high protein diet, are shown. The various forms and stages of the liver damaged by alcohol are described, with particular reference to therapy and prognosis.

PAUL N. HARRIS and K. K. CHEN, Lilly Research Laboratories, Eli Lilly and Company, Indianapolis:

Experimental Liver Injury: Photomicrographs illustrate liver injury produced by: (1) *p*-dimethylaminoazobenzene, a carcinogen, (2) a group of fourteen pure alkaloids derived from plants of the genera Senecio, Heliotropium and Crotalaria and (3) a miscellaneous group of agents, including seeds of Amsinkia horizontalis, tannic acid, carbon tetrachloride, diethylene glycol and a high cystine diet.

JAMES F. KELLY, D. ARNOLD DOWELL, JOHN E. DOWNING and JAMES F. KELLY JR., Creighton University School of Medicine, Omaha:

Roentgen Rays in Prevention and Treatment of Infections—A Fifty Year Review: Considerable experimental and clinical evidence has accumulated in the past fifty years on the use of roentgen rays in prevention and treatment of infections. The old concept of heavy dosage, such as used in treating malignant conditions, has been universally discarded in favor of lower voltage and lower dose therapy in treating infections. It is now recognized that therapy of inflammations and the therapy of tumors are two entirely different procedures. Observations of many workers who assisted in establishing these facts will be presented. Roentgen rays in infections have definitely passed from the theoretical to the practical stage.

WM. A. KNIGHT JR., R. O. MUETHER and ANNE SOMMER, St. Louis University School of Medicine, St. Louis:

Pancreatitis—Clinical and Diagnostic Studies: A graphic analysis of study of various types of pancreatic disturbance, including the result of the prostigmine diastase test.

R. O. MUETHER, WM. A. KNIGHT JR. and VICENTE MORAGUES, St. Louis University School of Medicine, St. Louis:

Liver Biopsy—Diagnostic Aid in Liver Disease: Pictorial demonstration of results of liver biopsy in inflammatory metabolic and neoplastic disease of the liver, using Kodachrome slides and charts.

KARL A. MEYER, DONALD D. KOZOLL, WILLIAM S. HOFFMAN, FREDERICK STEIGMANN and HANS POPPER, Hektoen Institute for Medical Research of the Cook County Hospital, Chicago:

Amino Acids in Clinical Medicine: The value of specially processed proteins and of amino acid preparations in the treatment of conditions accompanied with protein deficiencies will be demonstrated, both by the results obtained from clinical observations and those of laboratory studies. The role of specific amino acids in enhancing the biologic value of natural protein and in combating specific deficiencies will be explained. The etiologic and pathogenetic mechanism of protein deficiency in renal, hepatic and various surgical diseases will be discussed, as will the therapeutic indications of amino acids. The exhibit will describe methods for the biologic evaluation of protein preparations in animal and human subjects, and it will deal with the principles involved in the practical application of amino acid therapy.

ST. LOUIS PATHOLOGICAL SOCIETY, St. Louis:

Laboratory Demonstrations: A complete laboratory will be installed for blood sugar, blood urea and many other laboratory examinations, where physicians may have their own blood tested. Blood cell counts and blood staining will be demonstrated, and microscopes will be available to show various blood dyscrasias. Emphasis will be placed on the fact that the laboratory is not a substitute for case history and physical examinations, but rather an aid in differential diagnosis.

EDWARD M. GUNN, JOSEPH E. SMADEL, THEODORE E. WOODWARD, LIEUT. HERBERT L. LEY JR., CORNELIUS B. PHILIP, ROBERT TRAUB and ELIZABETH JACKSON, United States Army, Washington, D. C.:

Therapeutic Evaluation of Chloromycetin: The display features the therapeutic evaluation of chloromycetin on typhus and scrub typhus, depicting the method of treatment and the effect obtained.

JAMES A. WHEELER, Axtell Clinic, Newton, Kan.:

Encephalomyelitis Virus—Comparative Study of Western Equine Virus and St. Louis Virus: A comparative study is presented of western equine virus and St. Louis virus. This exhibit shows the reservoir as found in two separate studies (J. A. Wheeler; R. J. Blattner and J. V. Cooke) and the vector transmission of the two virus diseases. The object of this exhibit is to show the interesting comparison of the findings of two separate studies, in which two different vectors were involved with the transmission of each virus disease from sources found in nature. In western equine virus it was found that 50 per cent of assassin bugs from rats' nests in pastures contained virulent western equine virus, and the present theory is that the young assassin bugs gain their wings in the spring and fly to horses in the pasture. With the proper influx of seasonal mosquitoes the stage was set for an epidemic, which was found in 1941 to involve 50 per cent of the cases of blood samples in which a serum neutralization test was made for western virus.

COL. JOHN R. WOOD, M.C. and STANLEY H. DURLACHER, Medical Division, Army Chemical Center, Maryland:

BAL in Heavy Metal Poisoning: The exhibit shows the effect of BAL in heavy metal poisoning.

HILGER PERRY JENKINS, DAVID S. FOX, RUDOLPH W. JANDA and DOUGLAS PACKARD, University of Illinois College of Medicine and Woodlawn Hospital, Chicago:

Intestinal Intubation: The indications for intubation for relief of intestinal distention are presented by roentgenographic studies of illustrative cases. The mechanical details which are necessary for the successful use of the Miller-Abbott tube are demonstrated with the aid of a manikin. The hazards and limitations of intubation are pointed out. Cases are reviewed in which the Miller-Abbott tube was used to obtain decompression of the distended small intestine due to obstruction or paralytic ileus, thus obviating surgical treatment or permitting operation in more favorable circumstances. Although intestinal intubation is a standard procedure in many of the larger hospitals, there are still many communities where this type of service is not yet available.

LIBRARY, Washington University School of Medicine, St. Louis:

Manuscripts and Letters of William Beaumont, Pioneer American Physiologist: A collection of manuscripts and letters of Dr. William Beaumont, containing his account of the gunshot wound of Alexis St. Martin, which enabled Beaumont to study the processes of digestion, is exhibited. These studies led to the publication of Beaumont's famous book, "Experiments and Observations on the Gastric Juice and the Physiology of Digestion," 1833, and copies of the various editions are shown. Photographs and biographic material about Beaumont, such as notebooks, diaries and case books, are exhibited also.

OLIVER FIELD, Bureau of Investigation, American Medical Association, Chicago:

Mechanical Quackery: The exhibit shows various weird mechanical devices that have been foisted on the public for the cure of human ills. Among other items shown are Radioclast, Goetherator, Perkins' Tractors, Ghadiali Spectro-chrome, Radium or Vrilium Tube, Radiendocrinator, Radium Pad, Geo-Radium and nose adjusters.

A. RAY DAWSON, Veterans Administration, Washington, D. C.:

Physical Medicine and Rehabilitation in Tuberculosis and Thoracic Surgery: The ultimate goal in the rehabilitation of patients with tuberculosis and other diseases of the chest is not only the physical recovery of these persons but their training for future economic independence. The exhibit will include charts, photographs, slides, motion pictures and apparatus showing the various rehabilitation activities. Patients will also be demonstrated.

A. RAY DAWSON, Veterans Administration, Washington, D. C.:

Evaluation of Physical Capacity of Tuberculous Patients: The exhibit deals with the technic which is employed in physical medicine rehabilitation in the Veterans Administration Tuberculosis Hospitals to measure and evaluate the physical capacity of tuberculous patients, to perform the various tasks which are involved in daily living, such as self-care activities—eating, dressing and bathing, recovery and vocational activities.

SEDGWICK MEAD, Washington University School of Medicine, Department of Occupational Therapy, with the assistance of the Association of Occupational Therapists of Missouri, St. Louis:

Occupational Therapy: The exhibit shows photographs illustrating functions of occupational therapy from the physical aspect, psychosocial aspect and prevocational aspect.

HOWARD A. RUSK, GEORGE G. DEAVER and DONALD A. COVALT, New York University College of Medicine, New York:

Rehabilitation in Hemiplegia: The exhibit shows methods and devices for the late rehabilitation of patients with hemiplegia. Patients will be used in the demonstrations.

MILDRED ELSON and BARBARA WHITE, American Physical Therapy Association, New York:

Physical Therapy: The purpose of the exhibit is to acquaint the general practitioner with physical therapy and its use in providing complete care in various types of cases. The exhibit illustrates physical therapy as an essential part of good medical care and physical therapy procedures in the later stages of physical rehabilitation. A variety of cases for which physical therapy is prescribed and many of the different procedures used in physical therapy are shown.

HOWARD A. CARTER, Council on Physical Medicine, Committee on American Health Resorts, American Medical Association, Chicago:

American Health Resorts: The exhibit presents information concerning health resorts in the United States. Charts explain the aims and purposes of the Committee on American Health Resorts.

W. OLIVER KINCANNON, Federal Security Agency, Office of Vocational Rehabilitation, Washington, D. C.:

Vocational Rehabilitation for Civilians: The exhibit includes an outline of the vocational rehabilitation services available to disabled persons through a nationwide federal-state partnership program, with emphasis on the services of physical restoration.

JACOB J. WEINSTEIN, George Washington University School of Medicine and Gallinger Memorial Hospital, Washington, D. C.:

Parenteral Proteins in Surgery: The exhibit shows (1) the indications for parenteral proteins in both surgical and medical

cases; (2) tolerance studies with parenteral protein hydrolysate by intravenous, subcutaneous and intramuscular routes; (3) the physiologic and histologic alterations associated with protein deficiencies; (4) postoperative blood deficiency in various surgical procedures, with particular reference to the nitrogen loss and the particular references of its effect on the blood proteins and hemoglobin; (5) clinical results, showing the effects of protein hydrolysate in various surgical procedures on patients who have received protein therapy; (6) toxicities, describing reactions for the entire study, and (7) program for parenteral feeding with various types of surgical procedures.

ROBERT W. BARTLETT, Washington University School of Medicine, St. Louis:

The Surgical Management of Large Goiters: The exhibit shows photographs of patients before and after operation, the removed specimens and roentgenograms showing the pronounced tracheal distortion that occurs with certain large goiters and drawings detailing the technic of the operation providing the maximum exposure for removal of such growths with safety. Technical points of the operation and the type of anesthesia required are included.

GRAHAM ASHER, LAWRENCE STEFFEN and FRANKLIN D. MURPHY, University of Kansas School of Medicine, Kansas City, Kan.:

Latent or Subclinical Tetany—A Clinical Study of Its Presence in Cardiovascular Diseases: The exhibit shows descriptive charts of clinical features and symptoms, clinical charts of cases of latent tetany, illustrations and photographs of abnormal muscle responses. Descriptive leaflets of the exhibit, with the theoretical considerations, will be available.

LAURENCE F. GREENE, Mayo Clinic, Rochester, Minn.:

Urinary Incontinence in Females Due to Ectopic Ureters: Urinary incontinence occurs in females as a result of ectopic ureters. In this condition the ureter, instead of entering the bladder, opens into the urethra or the vestibule of the vagina and results in a constant uncontrollable escape of urine. This distressing anomaly can be easily recognized and completely cured by proper surgical procedures. The exhibit will include illustrative roentgenograms and a diagrammatic model.

ROBERT DEAN WOOLSEY, St. Louis University School of Medicine, St. Louis:

Thoracolumbar Sympathectomy for Essential Hypertension: Drawings show the operative procedure, and charts present the results of the operation.

FRED Z. HAVENS, Mayo Clinic, Rochester, Minn.:

Hypospadias—Surgical Correction: The exhibit shows by models, photographs and drawings (1) the various types and degrees of hypospadias and (2) the technic of the surgical treatment of this deformity by (*a*) the use of Edmund's operation for correction of the chordee and (*b*) the use of the inlying tubular graft for reconstruction of the missing portion of the urethra. A statistical analysis of the results in 80 cases in which operation was performed in the last five years will be presented.

WILLIAM J. ATKINSON JR., St. Louis University Medical School and St. Louis University Medical Service, St. Louis City Hospital, St. Louis:

Tetraethylammonium Chloride in the Treatment of Angina Pectoris: The exhibit presents charts and diagrams summarizing results obtained in treating 27 patients with angina pectoris with tetraethylammonium chloride. Twenty-four of these showed symptomatic improvement. Seventeen of the patients were treated for long periods (varying from six to fifteen months) with no harmful effects. Especially gratifying results are noted in long-continuing pain associated with coronary insufficiency and not relieved by glyceryl trinitrate. Judging correct dosage individually in each case is emphasized. An outline of the known cardiovascular pharmacologic aspects and other possible mechanisms of action is presented.

ALBERT E. GOLDSTEIN, Sinai Hospital and University of Maryland School of Medicine, Baltimore:

Studies in Polycystic Renal Disease: A comparative study was made of operative and nonoperative cases of polycystic renal degeneration. It is shown that in cases of polycystic kidney which are operated on there is a longer duration of life with complete relief of symptoms. The author's procedure is prescribed.

W. F. MELICK, D. G. GNOSE and J. F. MACKEY, St. Louis University School of Medicine, St. Louis:

Experimental Uses of Translumbar Aortography: The exhibit shows bas relief photographic copies of aortograms done preoperatively and postoperatively on hypertensive patients. Perirenal air studies and aortograms on case of hypertension due to adrenal adenoma are presented with case histories.

HUGH A. SCHROEDER, D. F. DAVIES, M. L. GOLDMAN, J. A. NUETZEL, N. S. OLSEN and A. H. WILLIAMS, Washington University School of Medicine, St. Louis:

Pathogenesis of Arterial Hypertension: The pathogenesis of arterial hypertension is indicated by the interaction of the various factors involved. These are the psychogenic, the neurogenic, the renal, the humoral and the effects of hypertension on blood vessels. Experimental work dealing with these factors will be shown. The effect of special diets and other measures in raising or lowering blood pressure will be demonstrated.

WILLARD BARTLETT JR., St. Louis University School of Medicine, St. Louis:

Clinical Research in Abdominal Surgery: The exhibit presents (1) text and charts setting forth the clinical course of a patient with severe streptococcic peritonitis, plus (*a*) the components of intake and output and pertinent data of his blood chemistry during a ten day period of parenteral feeding, (*b*) comment on the principles governing parenteral nutrition and maintenance of hemodynamics and (*c*) how the pitfalls of dehydration and edema may be avoided; (2) the quantitative estimate of gastrointestinal derangement in ileus of whatever origin and the characteristic differences in volumes recovered by nasal catheter suction in (*a*) mechanical obstruction, (*b*) peritonitis and (*c*) with protein depletion alone, and (3) the anatomic and physiologic reasons for weight reduction prior to the operative repair of large incisional hernia, outline of points of technic and preoperative and postoperative photographs.

GORDON M. SCHOEPFLE, Washington University School of Medicine, St. Louis:

A Student Experiment in Nerve Physiology: The exhibit shows a nerve chamber with adjustable silver electrodes, amplifier and cathode ray oscilloscope with appropriate synchronizing circuits to record single impulses in response to short shock electrical stimulation. Movable jack plugs allow the observer to vary conduction distance of the impulse and to adjust the interval between two shocks and thus determine excitability curves. Dials are "fool proof" in that neither machinery nor observer will suffer harm. This is the device actually employed by the students in the laboratory.

GARRETT PIPKIN and H. H. VIRDEN, St. Joseph Hospital, Kansas City, Mo.:

Indefinite Knee Symptoms Resembling Injured Cartilages: The exhibit illustrates the variations in anatomy of the suprapatellar pouch caused by the communication of the suprapatellar pouch with the knee joint. It is normal for a suprapatellar plica (fold) to occur in the synovia. This fold may become fibrosed, hyalinized or calcified and cause symptoms simulating closely a disturbance of the semilunar cartilage.

ANTHONY M. BARONE, Chicago:

Varicose Veins and Venous Thrombosis of the Lower Extremity: The exhibit includes the etiology, diagnosis, complications, sequela, differentiation of ulcers, various tests and

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treatments and an analysis of 1,000 cases of varicose veins. The differentiation, diagnosis and various treatments of venous thrombosis are given, including case reports.

WILLIAM MILTON ADAMS, Memphis, Tenn.:

Free Composite Grafts of the Nipples in Mammary Plasty: The exhibit shows pictures of cases before and after operation, as well as pictures and drawings illustrating the operation.

MERL CARSON and DOROTHY RINDERER, Washington University School of Medicine, St. Louis:

Postgraduate Medical Studies: The exhibit portrays the postgraduate activities of the Washington University School of Medicine. It consists mainly of posters, charts and photographs depicting various types of activities in the postgraduate school. The various types of classes that are offered during the year are represented so that the practitioner will have a definite idea as to the courses of study available.

A. C. STUTSMAN, Washington University School of Medicine, St. Louis:

Foreign Bodies of the Tracheal Bronchial Tree and Esophagus: The exhibit of roentgenograms shows the various changes produced by nonopaque bodies in the tracheal bronchial tree. Foreign bodies of the upper portion of the esophagus are presented.

GUERDAN HARDY, Washington University School of Medicine and St. Louis County Hospital, St. Louis:

Fractures of the Zygomatic (Malar) Bone—Diagnosis and Treatment: The exhibit includes charts showing causes of malar fractures, the diagnosis and associated injuries; photographs and roentgenograms of patients, and drawings showing proper approaches in both simple depression and comminuted fractures.

WILLIAM B. KOUNTZ, ESBEN KIRK, PHILLIP ACKERMAN, LILLI HOFSTETTER and MARGARET CHIEFFI, Washington University School of Medicine and St. Louis City Infirmary Hospital, St. Louis:

Changes in Man Associated with Age: The exhibit shows an evaluation from a physiologic and anatomic point of view of changes associated with age in man. Studies are presented which indicate that there is considerable variance in the functions of the young contrasted with the old. Attempts at modification of some of the functions are made by the administration of hormones, food substances and vitamins.

JAMES F. DOWD, St. Louis University School of Medicine, St. Louis:

Technic of Rhinoplasty: The exhibit presents the basic rhinoplastic technic as used by the author. A series of drawings depict the essential steps as they are done in the average case. Four sets of preoperative and postoperative photographs will be used to show the results obtained on four common types of nasal deformities. These will include the large dorsal hump, the large bulbous tip, the saddle nose and the traumatic deformity in which the nose is displaced beyond midline.

MOTION PICTURES

Motion pictures will be shown in the clinical presentation rooms adjoining the Scientific Exhibit. The following films will be shown daily from 12:15 to 3:15 p. m.:

UNITED STATES NAVY, Bureau of Medicine and Surgery, Washington, D. C.:

Clinical Malaria: The relationship of the life cycle of the malarial parasite in the blood stream to the patient's clinical symptoms is clearly shown by actual photography and animation. Three common types of infection (benign tertian, quartan and malignant tertian) are discussed. Sound, thirty minutes.

HARRISON L. MCLAUGHLIN, New York:

An Introduction to Fractures: An introduction to the subject of fractures in a general way. Sound, thirty minutes.

J. HORVATH, University of Erlangen, Erlangen:

Ultra Sound in Medicine: This film represents pioneer work in exploring the possibilities of ultra sound in medicine. Methods for generating vibrations too fast for hearing are shown, revealing the curious physical effects of such vibrations, particularly on liquids and certain biologic effects followed by the technical problems to be solved before therapeutic applications are mentioned, including preliminary results with microscopic findings. Silent, twenty-five minutes.

MILTON MCCALL and ARTHUR FIRST, Jefferson Medical College, Philadelphia:

Cesarean Section—Norton Paravesical Extraperitoneal Technic: A motion picture depicting the paravesical technic of Norton. This type of extraperitoneal cesarean section has proved safe even in cases of the most profound infection. The use of the technic obviates the sacrifice of the uterus by cesarean hysterectomy and makes difficult embryotomy unnecessary. An actually infected patient was used in making this film. Silent, fifteen minutes.

LESTER R. DRAGSTEDT, University of Chicago, Chicago:

Supradiaphragmatic Gastric Vagotomy for Peptic Ulcer—The Abdominal Approach: Technic of gastric vagotomy by the abdominal approach with illustrations of the anatomy of the vagus nerve. Silent, twenty minutes.

DONALD F. HILL, W. PAUL HOLBROOK, CHARLES A. L. STEPHENS JR., LEO J. KENT and EDNA MCCARTHY, Tucson, Ariz.:

Rheumatoid Arthritis: The method of preventing deformities and correcting deformities in rheumatoid arthritis, including end results in a number of patients, is depicted in this film. Silent, seventeen minutes.

LOUIS E. MOON and J. B. CHRISTENSEN, Creighton University School of Medicine, Omaha, Neb.:

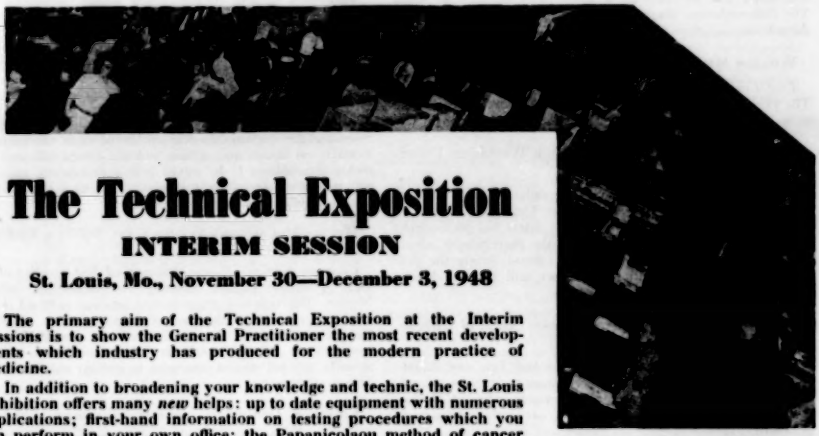
An Improved Technic for the Operative Treatment of Anorectal Lesions: Simple, practical and successful methods of making proctologic examination are presented and operative procedures for the treatment of common anorectal lesions demonstrated. A routine proctologic examination is shown, with animated anatomic illustrations reviewing the anatomy of the region followed by closeup shots of the examination in actual cases. A simple ligature type of operation for removal of internal and external hemorrhoids is shown, as well as operations for anal fissure, abscess and a simple fistula. Silent, forty-four minutes.

UNIVERSITY OF ILLINOIS, Division of Services for Crippled Children; Chicago:

Nursing Care in Poliomyelitis: This motion picture forms a coherent sequence demonstrating the technics used in all stages of poliomyelitis: (*a*) the acute stage, (*b*) the stage of spastic muscular activity and pain, (*c*) the stage of respiratory difficulty in bulbar cases, with details of procedure and patients in the respirator, and (*d*) the convalescent stage, with details of muscle training and underwater exercises. Sound, sixty-eight minutes.

BRITISH INFORMATION SERVICES:

Polio Diagnosis and Management: In this film, patients are shown illustrating: (1) differential diagnosis of the early stage of poliomyelitis, (2) the probable existence of many undiagnosed atypical forms of the disease, (3) the importance of correcting little unsanitary working habits among housewives, (4) the multiplicity of effects on the nervous system and (5) the necessity of cooperation among various individuals and agencies for restoring the patient to the best possible degree of productiveness. Sound, fifty-seven minutes.



The Technical Exposition

INTERIM SESSION

St. Louis, Mo., November 30—December 3, 1948

The primary aim of the Technical Exposition at the Interim Sessions is to show the General Practitioner the most recent developments which industry has produced for the modern practice of medicine.

In addition to broadening your knowledge and technic, the St. Louis Exhibition offers many *new* helps: up to date equipment with numerous applications; first-hand information on testing procedures which you can perform in your own office; the Papanicolaou method of cancer diagnosis; blood sugar screening test, etc. You can learn more about the newer discoveries—antibiotics, amino acid preparations, antihistaminics, hematinics, hormones, triple-sulfa drugs. Along with the new will also be found the standard and long established products . . . outstanding books of the leading medical publishers . . . modern hearing aids . . . nutritional products . . . infant specialties. Among other interesting and informative features will be televised surgical and clinical methods.

At each booth will be trained men, or women, ready to give useful information and help in solving your workaday problems. They cordially invite you (and so do we) to visit the exhibits whenever possible—before meetings, between meetings, and afterward—to get a clearer picture of current progress in practically every field of medicine. The Municipal Auditorium will be open daily from 8: 30 A M. to 6: 00 P. M. beginning Tuesday, November 30 and closing 12: 00 noon, Friday, December 3. Brief descriptions of some of the exhibits on this and the following pages will give you further information about what may be seen.

THOS. R. GARDINER, Business Manager and Director of Technical Exhibits.

ABBOTT LABORATORIES
Booth D-4

Desoxyn Hydrochloride, an effective cerebral stimulant with a wide variety of uses, and Pentothal Sodium, an intravenous anesthetic, will be the featured products in the Abbott Laboratories exhibit. Abbott representatives will welcome an opportunity to discuss the advantages of Desoxyn and the worldwide clinical background of Pentothal Sodium.

A. S. ALOE COMPANY
Booths D-20, D-22

On display here will be a cross section of the complete line of hospital, surgical, and laboratory equipment and supplies carried by the "world's largest surgical supply house" including a large number of specials from their war surplus and regular stocks. By all means, do not miss these money-saving values. If you would like to visit their home office and sales room—only a few blocks from the Auditorium—contact any of their representatives who will be happy to arrange a tour of their home office for you.

AMERICAN HOSPITAL SUPPLY CORP.
Booth A-13

Highlighting the American Hospital Supply exhibit will be Baxter Intravenous Solutions, Blood Transfusion and plasma equipment plus new Baxter disposable accessories for the administration thereof, Blood grouping Serums, and certain selected Tomac specialty products.

AMES COMPANY, INC.
Booth D-15

Ames Company representatives will be glad to discuss Deanol, the standard hydrocholeretic agent for the treatment of biliary tract diseases, and Decholin Sodium, pure sodium dehydrocholate. They will be demonstrating Clinitest and Hematest—simplified tests for the detection of urine-sugar and occult blood.

ARMOUR & COMPANY
Booth B-5

Armour Toiletries, a division of Armour and Company, is proud to exhibit at the Second Annual Interim Session of the American Medical Association its Stork Baby Products. These products, accepted for advertising in publications of the American Medical Association, include the famous Stork Castile Soap, a leader in baby's complexion care for 40 years, and the scientifically-safe companion products, Stork Baby Oil and Stork Baby Powder. Conventioneers are invited to see the Stork exhibit in Booth B-5.

THE GORDON ARMSTRONG CO., INC.
Booth C-16

Save a little time to inspect the Armstrong X-4 Baby Incubator. Recently this full length view modern incubator was awarded the acceptance of the Council on Physical Medicine of the American Medical Association. Added to this, the Armstrong X-4 Baby Incubator has enjoyed for several years, the approval of Underwriters' Laboratories and the Canadian Standards Association. The exhibit will not be for sales, but rather to answer questions and give service on the six thousand Armstrong X-4 Baby Incubators now in use all over the world.

ASSOCIATED MEDICAL CARE PLANS
Booth A-25

Fifty-five Blue Shield Plans are represented in this exhibit. Complete information from experienced personnel will be available at the booth.

Current reports on Blue Shield progress and national activities will be of special interest to those who wish to check on the advancement of medically sponsored nonprofit prepayment plans.

AVERST, McKENNA & HARRISON, LTD.
Booth B-16

Some valuable information on "Premarin" (Estrogenic Substances—water soluble), a highly effective and well-tolerated preparation of naturally-occurring, orally-active, conjugated estrogens (equine) may be had here. The potency of "Premarin" is expressed in terms of its principal estrogen, sodium estrone sulfate; and "Premarin" is available in tablets of four potencies and also in liquid form.

BECK-LEE CORPORATION
Booth B-1

Be sure to visit the Beck-Lee exhibit and see the new development in Electrocardiography—an electrocardiograph with an automatic developing camera which completely develops moving photographic paper or film! The entire process including developing, fixing, washing, drying takes place within the camera. The minute electrical currents of the human heart are picked up by the electrocardiograph and recorded on moving photographic paper within the camera. A continuous photographic record of the heart current rolls from the camera until the cardiogram is completed.

MARJORIE BELL CO.
(between D-9 and D-13)

CREME-LACQUER a fascinating hairdressing by Marjorie Bell that is non-stiffening, non-alcoholic, non-flaking and non-oily after applying to your hair, will attract your attention here! To a patient, the psychological value of boosting morale by having his or her hair nicely groomed with shining, youthful highlights, is immeasurable. To the well person in professional life it gives assured confidence in presenting a well-kept appearance. Be sure to stop by and become acquainted with this unique preparation.

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THE BEST FOODS, INC.

Booth B-7

Facts about Nucoa, the wholesome, nutritious vegetable margarine, which contains 15,000 units of Vitamin A to the pound, will be available at the Best Foods exhibit, B-7. Also of direct significance to everyone will be the famous Best Foods—Hellmann's Real Mayonnaise, and other Best Foods' products. Miss Elsie Starck, Director of Consumer Education, will be in charge of the booth and will welcome questions about the products.

THE BLAKISTON CO.

Booth D-6

New volumes and new editions which have been added to Blakiston's famous Recent Advances Series will tempt you to browse through this exhibit. Ask to see the following new titles: Edwards—Recent Advances in Surgery; Burn—Recent Advances in Public Health; Smith & Gault—Essentials of Pathology; Boxburgh—Common Skin Diseases, New, 8th Ed.; Fuchs—Diseases of the Fundus Oculi with Atlas; Epstein—Strabismus; and other new and standard BLAKISTON BOOKS.

BURNS CUBOID CO.

Booth B-24

During recent annual and interim A.M.A. sessions a certain colorful masonite display has begun to mean "foot comfort" to thousands of doctors attending these meetings. This beautiful piece, symbolizing foot balance, the central theme of Burns Cuboid Company exhibits, and this year it will again occupy a prominent place in their booth B-24. On one side it will be flanked by one of the company's four-color HYGEIA ads mounted on a large card. On the other side an electric flasher sign will reveal a Cuboid Balancer showing the shape and anatomical spacing of its "raises."

BURROUGHS WELLCOME & CO. (U.S.A.) INC.

Booth D-2

New and important clinical data on 'Wellcome' GLOBIN INSULIN will be available at the B. W. & Co. booth D-2.

BURTON MANUFACTURING COMPANY

Booth D-10 (a ½)

"Flo-Lite" a new kind of medical light that actually floats into position, thereby eliminating the necessity to make multiple floorstand adjustments, will be introduced here. With this new kind of light a doctor may with the slightest hand movement adjust it from a position illuminating the feet of a patient to illuminating the head—adjustment over an area of approximately 6 feet by the mere movement of a finger. The Lighting Unit itself is the famous Burton Fresnel, 1,000 footcandle power heat-free beam of color-corrected illumination.

CAMEL CIGARETTES

Booth B-13

CAMEL Cigarettes will present a dramatic full color review of their recent medical research on smoking, as well as the details of the nationwide survey showing that "More Doctors Smoke Camels Than Any Other Cigarette." Another panel will illustrate the absorption of nicotine in the respiratory tract. Representatives will be present.

CAMERON SURGICAL SPECIALTY COMPANY

Booth C-7

See the Cameron Cauterodynes with Spark-Gap, Radio-Frequency and Blended Circuits, the Cauteradio and other Units for all phases of Electro-Surgery, Electro-Cauterization, Electro-Coagulation, Desiccation and Fulguration. Also of interest will be the Electro-Diagnostic Lamp and Instrument Sets, Coagulair Sigmoidoscope, Tele-Vaginalite, Microlite and other Headlites, Binocular Loupes, Specula, Endoscopes, Retractors, and other illuminated Instruments for all types of Diagnosis, Treatment, and Surgery.

CARNATION COMPANY

Booth D-21

An attractive display on Carnation Evaporated "Milk—"the milk every doctor knows,"—will attract visitors to booth D-21. Some valuable information on the use of this milk for infant feeding, child feeding, and general diet will be presented; and the method by which Carnation is generously fortified with pure crystalline Vitamin D—400 U. S. P. units per reconstituted quart—will be explained. Interesting literature will also be available for distribution.

CENTRAL PHARMACAL COMPANY

Booth D-17

One of the interesting features of the Central Pharmacal display will be the new and improved triple-sulfa products, which include a special Palatab for use in pediatrics. On exhibit also will be their Synophylate line. These theophylline-sodium-glycinate preparations offer many advantages in the treatment of certain cardiac and asthmatic conditions, and are products of choice when theophylline is indicated. Tablets Bestrol, brand of Dienestrol, will be prominently displayed along with other Council-accepted products.

CIBA PHARM. PRODUCTS

Booths C-22, C-24

Recent developments in the clinical use of PYRIBENZAMINE, an effective antihistaminic for relieving symptoms of allergy, will highlight the Ciba exhibit. Representatives in attendance will gladly answer any questions you may have concerning this product. Samples and literature will be available upon request.

COOPERATIVE MEDICAL ADVERTISING BUREAU

Booth A-10

Copies of the 31 state medical journals, members of the Bureau, will be on display. Representing 42 state medical associations, these publications follow the A. M. A. high standards in acceptance of advertising. Prospective advertisers may secure sample copies, rates, and other information at the booth. Also offered are "Advertising Service," a booklet outlining the services performed for both advertisers and advertising agencies, and the Bureau Budget which offers 34 different plans for coverage in the entire group of publications.

C.S.C. PHARMACEUTICALS

Booth D-20

The C.S.C. Pharmaceuticals display will feature the various dosage forms of penicillin used by the physician today. Appropriate literature will be available describing not only the specific indications for penicillin but also the most recent consensus regarding dosage and modes of administration. The unique C. S. C.-Disposable Syringe for administration of Crystalline Procaine Penicillin G in Peanut Oil-C. S. C. will also be available for inspection.

CUTTER LABORATORIES

Booth B-19

Cutter Laboratories cordially invite you to inspect the complete line of Blood Fraction products including Albumin, Fibrin Foam and Thrombin, Hypertussis, Immune Serum Globulin, Plasma, and Thrombin. Cutter Intravenous Solutions in Saftiflasks for pre-operative and post-operative sedation will also be shown. Along with these you'll find all types of Expendable Equipment for administering Intravenous medications. Stop by and see them at booth B-19, won't you?

DEVEREUX SCHOOLS

Booth D-14

Devereux Schools provide the physician with facilities for the education and treatment of children having academic or emotional difficulties. Twelve Devereux Schools in Pennsylvania and California offer a controlled environment and modern training shaped to the needs of each child. A psychiatrist, two physicians, and a psychologist, all in residence, cooperate with the referring physician in his plans for the child's training and care. Representatives at Booth D-14 will gladly answer questions or discuss how Devereux may serve you and your patients.

E & J MANUFACTURING CO.

Booth B-28

New E & J development in respiratory equipment will be displayed by the E & J Manufacturing Company. On exhibit will be the latest model of the E and J Resuscitator Inhalator Aspirator. Resuscitation of infants will be dramatized by the use of E and J equipment on a plastic clinical doll in which the functioning of the lungs can be observed.

EDIN ELECTRONICS CO.

Booth B-26

The EDIN Electronics Company will exhibit the EDIN Ink-writing Cardiograph which has many outstanding features including overload protection and interlocking switches to prevent error in operation. Other items on display will be the EDIN Ink-writing Encephalograph and a line of research equipment. EDIN products are sold and serviced by reliable distributors throughout the world.

ELECTRONIC SURG. EQUIP. CO., INC.

Booth B-31

The "RADIOSURG SCALPEL" (a fully rectified cutting current of advanced engineering design) and other new instruments for electronic surgery will comprise an informative exhibit here. The portable operating unit with two operating hand pieces—one for cutting, the other for hemostasis—will be particularly interesting.

ENCYCLOPAEDIA BRITANNICA

Booth C-30 (w ½)

The Encyclopaedia Britannica, the venerable reference work that is eight years older than the Declaration of Independence and 65 years older than the city of Chicago, where it has been edited and printed for many years will interest you here. It was first published in 1768 by a "Society of Gentlemen," in Edinburgh. Today the 24 volume set is written by experts all over the world, including Albert Einstein and George Bernard Shaw. In co-operation with specialists at the University of Chicago, with which Britannica is affiliated, articles are constantly surveyed to keep them abreast of modern events and discoveries. Top authorities then do the writing for the frequent new printings.

FANCEE FREE MFG. CO.

Booth C-18

Fancee Free garter belts may be the answer to your garter problems for mothers-to-be, and others who must refrain from pressure or binding. This all elastic garter belt which fits around the waist in back and below the abdomen in front, to eliminate pressure, will be modeled in booth C-18. Two snap on satin tabs transform *Fancee Free* into a combination garter belt and sanitary belt, ending "double belt trouble."

H. G. FISCHER & CO.

Booth B-36

In B-36 see H. G. FISCHER & CO'S modern, outstandingly efficient yet low priced X-Ray and Physical Therapy Apparatus! Have its many features of advantage demonstrated without obligation. Inquire about their other models of value not on exhibit. H. G. FISCHER & CO'S 38 years devoted solely to designing and manufacturing x-ray and physical therapy equipment make them a leader in this field and guarantee products of dependable performance and great durability. Your visit will be welcome and appreciated.

GERBER PRODUCTS CO.

Booth A-29

Be sure to see the display of Gerber's new Strained and Junior Meats for babies. Both textures are available in beef, veal, and liver. Feeding analytical data, informational literature on prenatal and child care, adult special diet menus, and samples of Gerber's strained foods and cereal product will be available on request.

GRADWOHL LABORATORIES

Booth C-26

The Gradwohl exhibit will illustrate the activities of this organization: the preparation of laboratory reagents; training school for laboratory and x-ray technicians; publication of a monthly journal called LABORATORY DIGEST; and publication of the fourth edition in three volumes of the textbook, "Clinical Laboratory Methods and Diagnosis," by R. B. H. Gradwohl, M.D. A separate feature of the exhibit will be illustrations of the Papanicolaou method in color. Full literature on all activities will be available.

GRUNE & STRATTON, INC.

Booth A-16

Outstanding among the recent publications of GRUNE AND STRATTON are H. A. Davis' SHOCK AND ALLIED FORMS OF FAILURE OF THE CIRCULATION, Kurt Goldstein's LANGUAGE AND LANGUAGE DISTURBANCES, and Eric Ponder's HEMOLYSIS. Earlier publications in

all fields of medical and surgical practice will be available. In addition to American publications, leading British periodicals issued by the B. M. A. will be shown.

HAMILTON-SCHMIDT SURGICAL CO.
Booth D-27

An interesting selection of Burdick physio-therapy equipment, a new radar short wave treatment unit, and other surgical equipment will spotlight the Hamilton-Schmidt exhibit. Information on the operation of these units will be given to visiting physicians.

HANOVIA CHEMICAL & MFG. CO.
Booth B-12

Some interesting information about an entirely new Wall Type Aero-kromayer Lamp at a new low price will be heard by visitors here. Representatives will be at your service to present you with all the facts. General body type ultraviolet lamps, Sollux Radiant Heat lamps, and Safe-T-Air Models for the destruction of air-borne bacteria will be demonstrated.

THE HARROWER LABORATORY
Booth D-9

The Harrower exhibit will present gastroscopic and acidity control studies relative to Mucotin, a mucin antacid mixture. The exhibit will have three main points of interest: gastric acidity control studies; a case history report of a patient with a gastric ulcer (the ulcer and its response to treatment are illustrated gastroscopically); and gastroscopic pictures showing the coating action of Mucotin.

PAUL B. HOEBER, INC.
Booth A-30

PAUL B. HOEBER, INC., Medical Book Department of Harper & Brothers, Booth A-30, invites you to inspect the entire list of HOEBER publications including these new volumes for the family physician: the new fourth edition of Alvarez' *Introduction to Gastro-Enterology*, Barrow's *Clinical Management of Varicose Veins*, Mengert's *Postgraduate Obstetrics*, and Schwedel's *Clinical Roentgenodiagnosis of the Heart*. Late issues of the Hoeber journals, *Cancer* and *Psychosomatic Medicine* will also be available. Be sure to visit the Hoeber booth.

HOLLAND-RANTOS CO., INC.
Booth B-18

KOROMEX JELLY and KOROMEX CREAM will be featured at booth B-18. You may recall it was the Holland-Rantos Company, Inc., that pioneered the introduction of modern contraceptive technique—so frequently referred to as *the Koromex Method*. The medical background and clinical use of KOROMEX JELLY dates back to 1925. Medical service representatives will be on hand to discuss with interested physicians the latest data on KOROMEX JELLY and CREAM.

W. S. HORN COMPANY
Booth C-21 (a ½)

The Hospital Bedhight Bedpan Commode, a portable device for patients occupying hospital beds, will be on display here. A standard bedpan is used as the vessel and the seat is on a level with the top of the bed. This commode offers to many surgical, obstetrical, and surgical patients the comfort and convenience of the natural sitting position with a minimum of effort.

HYGEIA, THE HEALTH MAGAZINE
Booths A-4, A-6

In the HYGEIA booth, you will find a pictorial representation of editorial contributors, the processes of editing, the methods used for screening and approving advertising and the various types of readers who benefit from this health magazine. Also presented is a series of sequence lighted color transparencies showing how HYGEIA'S health information is used by professional, educational, and family groups.

INTERCHEMICAL CORP.
Booth A-38

The Biochemical Division of Interchemical Corporation will display two dosage forms of its modified casein hydrolysate—FLAMINE LYOPHILIZED and SOLUTION FLAMINE 10% WITH DEXTROSE 5%. These preparations which are designed for intravenous alimentation provide adequate amounts of amino acids for the treatment of hypoproteinemia. They are exceptionally well tolerated. Representatives will be present to discuss amino-acid therapy.

IODINE EDUCATIONAL BUREAU, INC.
Booth A-22

This exhibit will emphasize the place of iodine and its compounds and preparations in the fields of surgery, medicine, and nutrition. Samples of official U. S. P. and N. F. preparations containing iodine and samples of iodine preparations accepted by the Council on Pharmacy and Chemistry of the American Medical Association will be displayed. Representatives of the Bureau will be on hand to offer to those in attendance the Bureau's bibliographic and other services in connection with iodine.

JONES METABOLISM EQUIP. CO.
Booth A-17

All physicians concerned in any way with metabolism work, whether running own tests or referring cases elsewhere, will be interested in inspecting the New Jones SUPER MOTOR BASAL metabolism unit. The additional exclusive features of this scientifically-advanced unit enable the technician to obtain fully satisfactory tests on the most extreme cases, in spite of irregularity of breathing or lack of patient cooperation.

JORDAN PUMP COMPANY
Booth B-14

The center of interest at the Jordan exhibit will be a 3½ pound motor driven pump for penicillin Mist, replacing the need of heavy oxygen equipment. A pressure and vacuum pump unit, equipped with a special flutter valve to positively control negative pressure within the head will also be of interest.

LANTEEN MEDICAL LABORATORIES, INC.
Booth A-40

LANTEEN MEDICAL LABORATORIES, INC., cordially invite you to visit their exhibit booth. Featured will be their well-known Lanteen Flat Spring Diaphragm. Representatives will be pleased to discuss an improved diaphragm fitting technique.

LEA & FEBIGER
Booth A-28

Lea & Febiger invite you to stop at Booth A-28 and examine their selection of new books and new editions, books on Pathology, Gray—Anatomy of the Human Body; Kraines—Therapy of the Neuroses and Psychoses; Quiring—Collateral Circulation; Burch and Winsor—Primer of Electrocardiography; Burch and Resnik—Primer of Cardiology; Ormsby and Montgomery—Diseases of the Skin; Joslin—Diabetic Manual; Frohman—Brief Psychotherapy; Herbut—Surgical Pathology and many other books of practical help and guidance.

LEDERLE LABORATORIES DIVISION (AMERICAN CYANAMID COMPANY)
Booth C-1

Lederle Laboratories are proud to have the privilege of exhibiting their recently developed preparations at the Interim Session. Included will be preventive and therapeutic preparations proven to be helpful in the practice of medicine and surgery and accepted as definite advances in the physician's armentarium.

ELI LILLY AND COMPANY
Booths B-11, B-13

Featured at the Lilly exhibit will be new therapeutic developments and a demonstration of the Blood Sugar Screening Test (Wilkerson-Heftmann Method). This new test takes only five minutes to perform, is accurate within 5 mg. per cent of true glucose value and requires but 0.1 cc. of blood. No preparation, standardization, pipetting, titration, or distilled water is necessary. Your Lilly medical service representative cordially invites you to visit the Lilly exhibit located in booths B-11 and B-13.

J. B. LIPPINCOTT COMPANY
Booth A-31

J. B. Lippincott Company presents an interesting and active exhibit of professional publishing. With the "pulse of practice" centering in an advisory editorial board of active clinicians who constantly review the field, current and coming trends in medicine and surgery are known continually. On the studied recommendations of these medical leaders, Lippincott Selected Professional Books are undertaken.

LUZIER'S, INC.
Booth B-2

A complete display of Luzier's Fine Cosmetics and Perfumes will be exhibited in Booth B-2. This will be of interest to dermatologists and allergists as well as to the ladies who visit the Convention. Officials of Luzier's, Inc., will be on hand to explain Luzier's Service in the field of allergy.

M & R DIETETIC LABORATORIES, INC.
Booth C-6

Similac, a food for infants, derived either partially or entirely of breast milk, will be the center of interest at the M & R Dietetic exhibit. Representatives will appreciate the opportunity to discuss the merit and suggested application for both the normal and special feeding cases.

THE S. E. MASSENGILL COMPANY
Booth D-25

The various Council-Accepted Massengill pharmaceuticals will be displayed at the Interim Meeting. Among these is Methadone, the new synthetic analgesic which roughly parallels the action of morphine. Company representatives will be on hand to discuss various Massengill preparations and to arrange for periodic visits by Massengill sales representatives to physicians not being called on regularly.

F. MATTERN MANUFACTURING CO.
Booth C-10

At the Mattern booth visitors may see the new MFX 200 Unit with push-button control originated by Mattern. In addition, information concerning other Mattern units—both new and old—will be available.

MEAD JOHNSON & COMPANY
Booth C-5

Amigen and Protolysate will highlight the Mead Johnson Interim display. Mead Johnson has pioneered the amino acid field commercially; the products have been described in more than four hundred articles in the medical literature. Trained representatives will be at the Mead exhibit to discuss details of the new amino acid products. Shown also will be Dextri-Maltose, Pablum, Pabena, Oleum Percomorphum, and the other Mead products used in Infant Nutrition. Protenum a new high-protein product will be displayed, also Lonalac for low-sodium diets.

THE MEDICAL BUREAU
Booth A-1

Burnelee Larson offers the facilities of The Medical Bureau, an organization serving as counselor in placements of medical personnel to medical schools and universities, public health organizations, hospitals and institutions, group clinics, physicians in private practice and industry. The records of Diplomates of the American Boards, younger physicians interested in obtaining training and, also, of administrators, executive and supervising nurses, scientists, laboratory technicians, x-ray technicians, social workers and dietitians are available to those interested in the completion or re-organization of their staffs.

THE MEDICAL PROTECTIVE CO.
Booth B-15

The Medical Protective Company's representative, thoroughly trained in professional liability underwriting, invites you to visit booth B-15. He is entirely familiar with the principles of the reciprocal rights and duties of a doctor and patient and with the circumstances peculiar to that relationship. He will be glad to explain how his Company meets the exacting requirements of adequate liability protection, which are peculiar to the Professional Liability field.

THE MENNEN COMPANY
Booth B-17

The Mennen exhibit will include: Mennen Baby Oil, Baby Powder, Mennen Castile Baby Soap, Tips-for-Tots (cotton tipped applicators) and Baby Cream.

MERCK & CO., INC.
Booth D-12

The Merck exhibit will be devoted to the important subject of streptomycin with emphasis on its role in the treatment of tuberculosis. X-rays taken before and after the use of streptomycin in patients with the following types of tuberculous lesions are on display: Patient A—Advanced caseoexudative tuberculosis in a diabetic;

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Patient B—Advanced pulmonary tuberculosis and tuberculous pyopneumothorax; Patient C—Advanced pulmonary and laryngeal tuberculosis; Patient D—Acute miliary pulmonary and ulcerative oropharyngeal tuberculosis.

THE WM. S. MERRELL COMPANY

Booth A-24

Featured here will be Diothane Ointment with Oxyquinoline Benzoate, an improved preparation for applying an anesthetic to areas that require prolonged contact and where it is desirable to provide a protective antiseptic coating. Of relatively low toxicity, Diothane Ointment with Oxyquinoline Benzoate has established a reputation for safety in clinical use.

MINE SAFETY APPLIANCES CO.

Booth D-31

The MSA Exhibit will feature the Pneophore, the wartime development of the Aero Medical Laboratories at Wright Field. It will include photographs of the Pneophore in clinical use as an emergency respiratory aid in Polymelitis and a therapeutic adjunct in the treatment of Anthrasilicosis. The treatment of Anthra-silicosis is a comparatively late development which has grown out of clinical work at the Barton Memorial Hospital, Philadelphia, and White Haven Hospital, White Haven, Pennsylvania.

THE C. V. MOSBY CO.

Booth A-15

Visitors attending the Interim Session are cordially invited to visit the MOSBY booth, A-15, just inside the exhibit hall. Courteous attendants will be in charge to serve the doctors on their book needs. Among the new titles to be displayed will be Anderson, "Pathology"; Ilgenfritz, "Preoperative and Postoperative Care"; Egel, "Treatment of Cerebral Palsy Child"; Kramer, "Clinical Orthoptics"; Dunbar, "Psychosomatic Diagnosis and Treatment"; Black-Vaughan, "Practice of Allergy"; Kleiner, "Human Biochemistry"; and more than twenty other new books and new editions.

G. H. PACKWOOD MFG. CO.

C-21 (5½)

The Packwood exhibit will feature improved Paxlanosav Heavy Duty Granulated Skin Cleanser into which greater amounts of Paxlanosav Emollient have been integrated. Paxlanosav Emollient combines generous quantities of lanolin plus other fine skin normalizers that make it more effective than lanolin alone because more remains during the wash to help protect the natural acid mantle of the skin. In addition to the recognized remarkable cleansing ability of Paxlanosav Heavy Duty, other improvements have been made to keep it free-flowing in any powdered soap dispenser, to increase the lather, and to make it more economical to use.

PARAVOX, INC.

Booth C-17

A brilliantly lighted neon display will greet visitors at the Paravox booth. The various production stages of the Paravox Hearing Aids are graphically mounted against a black mirrored surface with gold lettering. Each part is made from an unusual irridescently luminous orange plastic and is extremely effective. This use of plastic in the production of their product recently won the first and only award in the Communications Class of the Modern Plastic's seventh annual competition.

PARKE, DAVIS & COMPANY

Booth D-1

Members of the medical service staff of PARKE, DAVIS & COMPANY will be available at their technical exhibit for consultation and discussion relating to regular Council-accepted products classified in their pharmaceutical, biologic, and medicinal Lists. Unusual Specialties—Benadryl, Therlin, Thrombin Topical, Mapharsen, Dilantin Sodium, Antibiotics, and various Biologics—will be featured in the exhibit. You are cordially invited to call at the P-D booth with the assurance your interest will indeed be very much appreciated.

THE E. L. PATCH CO.

Booths B-32, B-34

Their two most recently Council-accepted products—ALZINOX and GLYTHEONATE—will merit your attention at this exhibit. Alzinox is the Patch brand of Dihydroxy Aluminum Aminoacetate, combining the amino acid, glycine, with aluminum. This combination is of particular value in hyperacidity and peptic ulcer because it provides both rapid and prolonged action without acid rebound. Glytheonate Tablets and Suppositories provide Theophylline Sodium Glycinate permitting high dosage levels of Theophylline with minimum gastric irritation. Patch representatives will be glad to welcome you and tell you about these new products, and also about your old friend, KONDREMUL.

PET MILK CO.

Booth B-25

An actual working model of a milk condensing plant in miniature will be exhibited by the Pet Milk Company in booth B-25. This exhibit offers an opportunity to obtain information about the production of Pet Milk, its use in infant feeding, and the time-saving Pet Milk services available to physicians. Miniature Pet Milk cans will be given to the physicians who visit the Pet Milk booth.

PETRA MANUFACTURING COMPANY

Booth C-28 (± ½)

Booth C-28 deserves the attention of every convention visitor interested in professional garments for the doctor, nurse, or patient. These protective plastic garments—aprons and other articles—are precision designed and manufactured to give protection against acids, liquids, dust, dirt, chemicals. They are easily kept clean; a whisk of a damp cloth will wipe off any accumulations on the material.

PHILIP MORRIS & CO.

Booths A-2, A-3

Philip Morris & Company will demonstrate the method by which it was found that Philip Morris Cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches on this subject and problems on the physiological effects of smoking.

W. P. PRIOR COMPANY

Booth C-4

Of special interest at the Prior exhibit are their LOOSE-LEAF Publications: Tice's MEDICINE, Lewis-Walter's SURGERY, Brennemann-McQuarrie PEDIATRICS, and Davis' GYNECOLOGY AND OBSTETRICS. This year several hundred new pages were furnished to owners of these sets, including an entirely new volume for Tice's Medicine on Gastrointestinal Diseases.

PROFESSIONAL BUDGET PLAN

Booth C-8

Efficient office organization, effective control of accounts, and ethical practice-building ideas will be featured at the exhibit of the Professional Budget Plan. Collection of cash and time payments (old accounts, too), a smoothly functioning appointment system, and simplified bookkeeping are but three of the major points covered. See the special counsellor at the booth to learn how this modern business system fits your practice.

THE PYRAMID RUBBER CO.

Booth B-23

Evenflo "America's Most Popular" All-in-One Nurser, will be displayed in four and eight ounce sizes, both individually and in attractive Layette Packages. Equipment and illustrations will demonstrate how Evenflo "Breathes as it Feeds." Also, be sure to see the new Evenflo Brushless Baby Bottle Cleanser which dissolves milk film like magic.

RALSTON PURINA CO.

Booths C-23, D-19

The Ralston Purina Company presents a beautiful new booth. Colorful translights graphically illustrate nutrition facts about their two whole wheat hot cereals—Instant Ralston and Hot Ralston—and show dietary uses for By-Krisp and Shredded Ralston. You can register for their excellent low calorie diet booklets, for five valuable allergy diets, and for a set of Feeding Directions forms for infants and young children. These are valuable time-saving services for the busy physician.

REXALL DRUG COMPANY

Booth C-11

At the Rexall exhibit you will be interested in learning all about the Petechiometer, pronounced PEE-TEE-KEY-AH-MET-ER—a new clinical device used in the measurement of increased capillary fragility and for the estimation of the therapeutic effect of drugs used in the treatment of increased capillary wall weakness. Increased capillary fragility is a syndrome complicating many illnesses.

SANBORN COMPANY

Booth D-11

On exhibit in Booth D-11 will be three completely new developments in instruments for cardiac diagnosis and research: the Sanborn Electromanometer, for direct recording of blood pressures (venous and arterial), intra-cardiac and spinal pressures, etc.; the "Poly-Viso," a two-to-four channel recorder for electrocardiograms, blood pressure, sphygmogram, electrokymogram, ballistocardiogram and other phenomena; and the Sanborn Electrokymograph. Also on display will be the popular Sanborn instruments for clinical use: the Viso-Cardiette, the Instomatic Cardiette, and the new Sanborn Metabolism Tester—the Metabulator.

SANDOZ PHARMACEUTICALS

Booth A-20

Physicians interested in migraine should visit the Sandoz exhibit, featuring an animated presentation of the current theory of the mechanism of migraine headache and relief following administration of Gynergen (ergotamine tartrate). Other preparations displayed include Digilanid (crystalline glycosides of Digitalis lanata), Sandoptal, Scillaren and Calglucon (the original calcium gluconate).

W. B. SAUNDERS COMPANY

Booth A-21

This Company extends a cordial invitation to visit their exhibit where they will show their complete line of medical books including Hyman's "Integrated Practice of Medicine," Gastro-enterology, Thorner's "Psychiatry in General Practice," Klinger's "Sexual Behavior in the Human Male," Beckman's "Treatment," 1948 Collected Papers of the Mayo Clinic, Meleney's "Surgical Infections," Lyons & Woodhall's "Atlas of Peripheral Nerve Injuries," Crile's "Thyroid Disease," Snyder's "Obstetric Analgesia and the Child," DeGowin, Hardin & Alsever's "Blood Transfusion," Bowling's "Acute Bacterial Diseases," A.M.A. Interns' Manual, Brams' "Treatment of Heart Disease," Cecil's "Practice of Medicine," and many others.

SCHERING CORPORATION

Booth A-12

Schering Corporation, the world's largest manufacturer of hormones, will feature *Estinyl* (ethinyl estradiol) the most potent oral estrogen in clinical use and *Neoliopax* a *safe* urographic radiopaque medium, and *Priodax*, a standard cholecystographic medium will also be displayed. Members of the medical and professional service staffs of Schering will be present to welcome inquiries on these important Council-accepted preparations.

SEARER RUBBER COMPANY

Booth B-29

The manufacturer of the "STEADIFEED" will demonstrate the unique aspects of this interesting Nursing Unit. A trial of STEADIFEED Nipples might prove to be the solution to some feeding problems you have encountered. Stop by for professional samples and additional details. Your visit is anticipated.

G. D. SEARLE & CO.

Booths A-9, A-11

At the Searle booths a large number of anatomic and pathologic subjects will be exhibited in colored transfiles, colored slides and plastic models. They will illustrate such conditions as congestive heart failure, bronchial asthma, hay fever, colitis, anesthesia, active rheumatoid arthritis, etc. Featured Products of Searle Research will be Aminophyllin, Metamucil, Diodoquin, and Gold Sodium Thiosulfate.

SHAMPAINE COMPANY

Booth C-12

The Shampaine Company plans to exhibit its completely head-end controlled Perfection Major Operating Table, the improved Garfield Proctoscopic Table, the famous Martin All-Purpose Chair-Table, the Steelux Physicians Examining Table, and a variety of Shampaine quality furniture and accessories. Literature will also be available illustrating and describing completely new Shampaine Obstetric and Delivery Tables, as well as the new Hermann Major Operating Table which for all-around maneuverability is in a class by itself.

SHARP & DOHME
Booths B-20, B-22

Sharp & Dohme extends a cordial welcome to all visitors at booths B-20 and B-22 where 'Delcos' Protein-Carbohydrate Granules for high-dosage protein therapy will be featured. Protein replacement therapy usually requires large and prolonged dosage—100 to 200 Gm. of protein daily, for several weeks. The simplest route is by mouth, where the only considerable problem, that of palatability, is easily avoided by administration of 'Delcos' Granules—a potentiated blend of high quality, whole proteins, casein and lactalbumin, protected from wasteful use as energy by the presence of carbohydrate, 30%, and wholly palatable even in big doses, maintained for weeks.

SHAY MEDICAL AGENCY
Booth A-7

Blanche Shay, Director, and other representatives of the Shay Medical Agency extend a warm and cordial invitation to all to visit them. There you may discuss your employment problem in strict confidence. Whether you are an employer seeking help or an applicant seeking a position, they can assist you. Your employment problem is their business—let them solve it for you.

THE SMITH-DORSEY COMPANY
Booth B-4

Aminophylline Suppositories and Estrogenic Hormones will be shown at the Smith-Dorsey exhibit as well as a wide variety of injectable preparations. Physicians are invited to make the Dorsey booth their headquarters during the show. Representatives will be happy to discuss the background and use of all products on display.

SMITH, KLINE & FRENCH LABS.
Booth D-7

The effectiveness of 'Benzedrine' Sulfate, N.N.R. (racemic amphetamine sulfate, S. K. F.) in controlling appetite *in the treatment of overweight* makes it imperative that every physician be conversant with the facts regarding this modern drug which *alone* successfully inhibits appetite. The use of thyroid in conjunction with 'Benzedrine' Sulfate is obviously superfluous say the manufacturers since thyroid is felt to be of virtually no value in weight reduction and may even be injurious, except when used alone to correct hypothyroidism.

E. R. SQUIBB & SONS
Booth B-9

Squibb will present televised surgical and clinical procedures at this year's AMA Interim Session. Television cameras will be located at the Firmin Desloge, St. Mary's and Barnes Hospitals. Programs will be presented over Station KSD-TV. Further information may be had at the Squibb Technical Exhibit—Booth B-9. Cooperating in the presentation are the Rev. Alphonse M. Schwitalla, Dean of St. Louis University School of Medicine, and Dr. Robert A. Moore, Dean of Washington University School of Medicine.

STEPHENSON CORPORATION
Booth C-13

In C-13 will be shown all models of the Stephenson Resuscitator. See how you can now reduce operating pressures as indicated and mix air with oxygen as signs of anoxia disappear. This leaves an inert gas in the alveoli and prolongs the life of the oxygen tank.

R. J. STRASENBURGH CO.
Booth B-30

Easier and more effective means of managing superficial mycotic infections featuring the latest development in fatty acid therapy—Caprylic Acid and its salts—will be on display here for your evaluation. Members of the professional service staff of Strasenburgh will be at your service.

SWIFT & COMPANY
Booth A-18

All-meat baby foods, Swift's Meats for Babies (Strained)—for very young babies—and Swift's Meats for Juniors (Diced)—for older children—are being exhibited by Swift & Company. These high protein, body-building foods are available in six varieties—beef, lamb, veal, pork, heart and liver. These products are also gaining rapid acceptance for adult special diets. Representatives at the Swift & Company booth will be pleased to have you taste and examine these products and to supply you with informative literature.

TAMPAX INCORPORATED
Booth C-14

With the rapidly developing preference for the TAMPAX method of menstrual protection, physicians will want to review the authoritative information on appropriate use of the three absorbencies—JUNIOR, REGULAR and SUPER. Trained educational consultants will welcome an opportunity to discuss these exclusive features with you at Booth C-14. You will also be interested in seeing the new Tampax Vendor! Ready accessibility, better sanitation and reduction in plumbing problems are a few of the advantages cited in current reports from installations.

CHARLES C THOMAS, PUBLISHER
Booth D-5

New monographs on speciality subjects for the general practitioner and for the specialist as well will highlight the Charles C Thomas Publishers exhibit. Examples of these are: Bax and Anson—THE TEMPORAL BONE AND THE EAR; DeCourcy and DeCourcy—PATHOLOGY AND SURGERY OF THYROID DISEASE; Klemme—THE NURSING CARE OF NEUROSURGICAL PATIENTS; Orr—NEURO-RADIOLOGY; Padgett and Stephenson—PLASTIC AND RECONSTRUCTIVE SURGERY; Seegers and Sharp—HEMOSTATIC AGENTS. Many new titles have been added in the American Lecture Series since the last meeting of the American Medical Association.

U. S. VITAMIN CORP.
Booth D-16

Enlarged color photographs of common oral lesions of nutritional deficiencies including glossitis, cheilosis, gingivitis and others . . . as well as improvement following administration of complete vitamin therapy . . . will attract your attention here. Complimentary copies of the illustrated brochure, "Diagnosing Vitamin Deficiencies," and other educational literature, will be offered.

THE UPJOHN CO.
Booths B-8, B-10

"Adrenal Cortex and Resistance" is the theme of the Upjohn exhibit. The central panel symbolizes that man's resistance to stress is being increased by science. The other panels show the effect on the adrenals of various stressors—infection, exercise, surgery, and anoxia. The final panel shows the relative potency of adrenal cortex sterile solution and lipo-adrenal cortex sterile solution.

WALGREEN DRUG STORES
Booth A-19

Something new in technical exhibits awaits you at the Walgreen booth, A-19—a panoramic display of the latest accepted pharmaceutical developments in each field of medicine together with descriptive literature on each of the products. Members of the medical profession are cordially invited to stop by. . . . "You're always welcome at Walgreens!"

WALLACE & TIERNAN PRODUCTS, INC.
Booth D-6

Visiting physicians are cordially invited to visit the Wallace & Tierman exhibit, booth D-6. In addition to the widely used prescription specialities—Azochloramid, Monomestrol and Desenex—they will display Sotradecol, the new Council-Accepted sclerosing agent for the injection treatment of varicose veins.

WHIRLPOOL CARRIAGE, INC.
Booth D-18

An interesting feature of this exhibit is a dramatic demonstration of the Schroeter Whirlpool Carriage, which offers partial and complete whirlpool therapy in any tub. The patient can be manipulated while receiving whirlpool therapy for every part of the body. Spray therapy is also featured. The carriage is a compact, portable and well-constructed piece of home, office and hospital equipment.

WHITE LABORATORIES, INC.
Booths B-6, C-15

White's Dienestrol Tablets and Dienestrol Suspension (Council Accepted)—a new orally effective synthetic estrogen—will be featured here. Complete information and literature regarding the advantages of Dienestrol's high biologic activity, excellent patient-tolerance, and economy will be available. Other products of White Laboratories, Inc. will be on display and White's Medical Service Representatives in attendance will be pleased to supply any further information requested.

THE WILLIAMS & WILKINS CO.
Booth A-23

The Williams and Wilkins Company, Medical Book Publishers, will exhibit several new titles including Grulee and Eley, The Child in Health and Disease; Rehfuss, Albrecht, and Price, Practical Therapeutics; and Kemp, Elementary Anesthesia. A special feature of the exhibit will be Brodsky's Atlas of Oral and Facial Lesions, which comprises a book of text and 100 picture slides in color. See the Williams and Wilkins Exhibit at Booth $A23.

WINTHROP-STEARNS, INC.
Booth B-3

WINTHROP-STEARNS, INC. extends a cordial invitation to visit their booth where they will feature transparencies of beautiful medical art by Mr. Leon Schlossberg. This well-known artist was a pupil and associate of the late Max Broedel, dean of medical artists and first American professor of medical art (at Johns Hopkins University). His work reflects the impressive style of Broedel to which has been added a unique transparency technic. The exhibit includes (1) kidney with renal pelvis and calices; (2) cardiovascular failure and edema; (3) brain, providing visualization of the thalamus, hypothalamus, and medulla oblongata.

WOODWARD MEDICAL PERSONNEL BUREAU
Booth A-32

An opportunity to discuss your personnel problems is offered by the Woodward Medical Personnel Bureau in Booth A-32. Many attractive openings from coast to coast and some interesting foreign possibilities are available. Whether your needs are for the present or future, stop by and become acquainted with this organization which has served the profession for 52 years.

WYETH INCORPORATED
Booth A-36

Wyeth Incorporated will devote special attention to their two distinctive specialties: MEONINE (dl-methionine) and NEOHETRAMINE. Meonine (in tablet form for oral use and crystalline for injection) is an important supplement to high protein diets in the treatment of liver damage, especially portal cirrhosis. NEOHETRAMINE is a remarkably safe antihistamine for the relief of allergic symptoms. Syrup Neohetramine, especially useful for infants and children, is also compatible with other drugs in prescriptions for coughs and colds.

THE YEAR BOOK PUBLISHERS
Booth D-3

At booth D-3, you will find the 1948 Year Books as well as general practice manuals and monographs which offer daily usefulness. Timely books to note include: Greenhill's *Office Gynecology* (5th Edition); and *Obstetrics in General Practice* (4th Edition); Wright's *Vascular Diseases in Clinical Practice;* Young's *Skull, Sinuses & Mastoids;* Compere & Banks' *Pictorial Handbook of Fracture of Treatment;* and many others. You are invited to request any of these publications for 10 days' examination.

F. E. YOUNG & CO.
Booth C-30 (a ½)

F. E. Young & Company in booth C-30 will demonstrate Sulf-A-Test, an accurate ten second urine test for all sulfa Drugs. Sulf-A-Test will show: (1) If previous treatment has been given; (2) If the kidneys are excreting the sulfa compounds after the initial dose; (3) The approximate mgs. % in the blood per 100 cc.; (4) If renal damage has been done. In such cases the sulfonamide compounds will be present after they normally should have been excreted from the body.

ZENITH RADIO CORP.
Booth C-19

At booth C-19 the Zenith Radio Corporation will exhibit the new Zenith '75' Hearing Aid—the radionic instrument formally announced to the profession in the *Journal of the American Medical Association* of February 28, 1948. Zenith representatives will be pleased to explain a plan whereby the '75' can be tested by any physician without cost or obligation to him or his hard-of-hearing patients.

ORGANIZATION SECTION

Washington Letter

(From a Special Correspondent)

Oct. 25, 1948.

"Walk Outs" at Veterans Administration Hospitals

An exhaustive study of irregular discharges, or "walk outs," of patients under treatment for tuberculosis in veterans' hospitals has been completed, and publication of the findings is scheduled for the near future. The investigation was made by William B. Tollen, Ph.D., of the Veterans Administration Research Division, at the request of Dr. J. B. Barnwell, chief of the Tuberculosis Division in the Department of Medicine and Surgery.

Between July 1946 and June 1947, the one year period covered by the survey, about 6,000 patients terminated their hospitalization without medical sanction, the study revealed. These irregular discharges outnumbered regular discharges by nearly 1,000.

According to data collected by social workers, measures most frequently mentioned which might have been effective in lowering the irregular discharge rate were: (1) intensive social case-work with the veteran and his family during and prior to hospitalization, (2) psychiatric treatment, and orientation of the hospital staff to a keener awareness of the emotional and psychic states of the tuberculous patient, (3) more personalized attention by staff members, (4) more careful and considerate application of hospital rules, policies and procedures governing hospitalization and (5) more sympathetic and discriminating applications of policies relative to pass privileges.

"Tuberculosis is a social as well as a medical problem," says the yet unpublished Tollen report. "Irregular discharge, which is part and parcel of the problem of treatment of tuberculosis, must be recognized as essentially a social problem. Tuberculous patients walk out of hospitals before treatment is completed because of the "push and pull" factors inside and outside the hospital that force them out. To prevent irregular discharges it is necessary to counteract these forces, to treat the total patient and not only the physical manifestations of his disease. The tuberculous patient needs help and support to withstand the emotional and psychic strains that hospitalization for tuberculosis produces.

"VA cannot by itself solve the problem of irregular discharge of tuberculous veterans, since the problem is basically social, a problem for the community at large. Failure of the community actively to seek a solution is costing the community more than the expense of eliminating and preventing irregular discharge of the tuberculous. Whoever can devise a method of convincing the community of this fact will serve not only the tuberculous but every other citizen as well."

Legion Still Cool Toward AMA-AHA Hospitalization Plan

It is still problematic whether the American Legion, at its national convention in Miami this month, will take up the veterans hospitalization proposal advanced last month by a committee representing American Medical Association and American Hospital Association. To date Washington offices of the Legion have not supplied certain factual data required for revision of the AMA-AHA prospectus which was presented to the Legion's medical advisory board, and there are definite signs that the veterans organization is opposed to the plan—provision for hospitalization of non-service-connected disabilities in nongovernmental hospitals, rather than in those operated by Veterans Administration, thereby permitting curtailment of VA's huge hospital expansion program and giving the prospective patient greater flexibility in choice of hospital and physician. Although it is possible that the issue will be discussed and acted on at the Miami convention, the fact that the advisory board has not yet passed on the proposal—even in principal—reduces the likelihood of such action.

Hawley Board Completes Pacific Field Trip

Members of the Committee on Medical and Hospital Services of the Armed Forces ("Hawley Board") have returned to Washington from a twenty-one day airplane tour of military medical facilities in Hawaii, Guam, Japan and Alaska. Recommendations designed to increase efficiency of medical and hospitalization operations through integration of Army, Navy and Air Force activities are in process of preparation for transmittal to Secretary of Defense James Forrestal. In Japan the committee members conferred with General Douglas MacArthur.

"Commanders of the three services facilitated immeasurably the studies being made by the committee," said Rear Admiral Joel T. Boone, executive secretary. "These field trips have contributed very materially to the wealth of information the committee has gathered for analysis."

Coming Medical Meetings

American Medical Association Interim Session, St. Louis, Municipal Auditorium, Nov. 30-Dec. 3. Dr. George F. Lull, 535 N. Dearborn St., Chicago 10, Secretary.

Annual Conference of State Secretaries and Editors, St. Louis, Hotel Statler, Nov. 28-29. Dr. George F. Lull, 535 N. Dearborn St., Chicago 10, Secretary.

National Medical Public Relations Conference, St. Louis, Hotel Statler, Nov. 27. Mr. Lawrence W. Rember, 535 N. Dearborn St., Chicago 10, Director.

American Academy of Dermatology and Syphilology, Chicago, Palmer House, Dec. 5-9. Dr. Earl D. Osborne, 471 Delaware Ave., Buffalo, Secretary.

American Academy of Pediatrics, Atlantic City, Chalfonte-Haddon Hall, Nov. 20-23. Dr. Clifford G. Grulee, 636 Church St., Evanston, Ill., Secretary.

American Association of Railway Surgeons, Chicago, Nov. 21-23. Dr. Raymond B. Kepner, 547 W. Jackson Blvd., Chicago 6, Secretary.

American Clinical and Climatological Association, Hot Springs, Va., The Homestead, Nov. 8-10. Dr. James Bordley III, Bassett Hospital, Cooperstown, N. Y., Secretary.

American Public Health Association, Boston, Nov. 8-12. Dr. Reginald M. Atwater, 1790 Broadway, New York 19, Executive Secretary.

American Society for the Study of Arteriosclerosis, Chicago, Hotel Knickerbocker, Oct. 31-Nov. 1. Dr. O. J. Pollak, Quincy City Hospital, Quincy 69, Mass., Secretary.

American Society of Anesthesiologists, St. Louis, Hotel Statler, Nov. 4-6. Mr. John H. Hunt, 188 W. Randolph St., Chicago 1, Executive Secretary.

Association for Research in Nervous and Mental Diseases, New York, Waldorf-Astoria Hotel, Dec. 10-11. Dr. Clarence C. Hare, 700 W. 168th St., New York 32, Secretary.

Association of Military Surgeons of the United States, San Antonio, Texas, Nov. 11-13. Dr. James M. Phalen, Army Institute of Pathology, Washington 25, D. C., Secretary.

Eastern Section, American Federation for Clinical Research, Philadelphia, Temple University School of Medicine, Dec. 4. Dr. J. Edward Berk, Temple University School of Medicine, Philadelphia, Chairman.

International College of Surgeons, U. S. Chapter, St. Louis, Kiel Auditorium, Nov. 16-19. Mr. Ralph E. Osborne, 1516 Lake Shore Drive, Chicago, Business Secretary.

Inter-State Postgraduate Medical Association of North America, International Medical Assembly, Cleveland, Public Auditorium, Nov. 9-12. Dr. Tom B. Throckmorton, 406 Sixth Ave., Des Moines, Iowa, Secretary.

Puerto Rico, Medical Association of, Santurce, Dec. 10-12. Dr. J. Basora Defillo, Box 3866, Santurce, Secretary.

Radiological Society of North America, San Francisco, Dec. 5-10. Dr. Donald S. Childs, 607 Medical Arts Bldg., Syracuse 2, N. Y., Secretary.

Southern Psychiatric Association, Dallas, Texas, Hotel Adolphus, Dec. 6-7. Dr. Newdigate M. Owensby, 384 Peachtree St. N.E., Atlanta, Ga., Secretary.

Southern Surgical Association, White Sulphur Springs, W. Va., Dec. 7-9. Dr. Alfred Blalock, Johns Hopkins Hospital, Baltimore 5, Secretary.

Western Surgical Association, St. Louis, Dec. 2-4. Dr. Warren H. Cole, 1853 W. Polk St., Chicago 12, Secretary.

GOVERNMENT SERVICES

ARMY

FOOD INSTITUTE OF THE ARMED FORCES

George H. Berryman, Ph.D., has been named head of the Nutrition Branch of the Quartermaster Food and Container Institute for the Armed Forces, which is located in Chicago. Dr. Berryman will direct basic research on nutritional aspects of food used by the Armed Forces or procured by the Department of National Defense for feeding programs in other parts of the world. During the war, Dr. Berryman was Commanding Officer and Director of Research of the Medical Department's Nutrition Laboratory in Chicago. He received his doctorate at the University of Minnesota (Mayo Foundation) and is at present completing additional work at the University of Chicago Medical School which will lead to the M.D. degree.

Harry Spector, Ph.D., has joined the research staff of the Quartermaster Food and Container Institute for the Armed Forces, which is a laboratory of the Research and Development Branch of the Quartermaster General's Office. Dr. Spector will direct research on the effect of military operations on physiologic processes and also on the physiologic effects promoted by the feeding of processed foods deficient in nutritional content. He received his doctorate at the University of Wisconsin, where he was engaged in biochemical research, and later was on the faculty of the University of Illinois for five years.

Mr. Albert S. Henick recently became a member of the Chemical Branch of the Food and Container Institute, and Mr. Jack Mayer has been assigned to the Animal Products Branch. Mr. Henick formerly was with the laboratories of the American Meat Institute, conducting research principally on the autoxidation of fats, while Mr. Mayer for twelve years was with the United States Food and Drug Administration and for four years was on seafood inspection duties in the New Orleans area.

ARMY MEDICAL LIBRARY

At the October 21 meeting of the Association of Honorary Consultants to the Army Medical Library, the Nominating Committee nominated Dr. Morris Fishbein to succeed himself for a four year term on the Executive Committee, and Colonel Joseph H. McNinch, MC, USA, the Director of the Army Medical Library, was nominated to be Secretary of the Association for a term of three years.

The late Mrs. Emma Wheat Gilmore bequeathed a sum of money to the Army Medical Library for the establishment of a fund to be known as the Gilmore Bequest, to be used at the discretion of the Surgeon General for the benefit of the library.

The next meeting of the Committee of Consultants for the Study of the Indexes to Medical Literature published by the Army Medical Library will be in the latter half of November, at which meeting the persons preparing the indexes now in use will be asked to explain the preparation of their publications to the Committee.

TRAINING IN CIVILIAN INSTITUTIONS

The following additional Medical Department officers have been accepted by civilian schools and hospitals for training: Lieut. Colonels Stephen W. Ranson, Washington-Baltimore Psychoanalytic Institute, Baltimore, psychoanalysis; Louis S. Leland, Bellevue Hospital, New York, dermatology; Majors Frank A. Goss and Frank E. Bunts, Educational Institute, internal medicine; John F. Harris, Minnesota Department of Health, St. Paul, communicable disease control; Alfred A. Hellams, Cook County Graduate School of Medicine and Illinois Neuropsychiatric Institute, Chicago, neurology; Captains Richard A. Hayden, St. Mary's Hospital, Brooklyn, obstetrics and gynecology; Robert L. Koenig, New York University, New York, tropical medicine; Roy E. Campbell, Grady Memorial Hospital, Atlanta, Ga.; First Lieutenants Harry F. Sproat, New York University, New York, tropical medicine; Charles A. DeLaney, Santa Monica Hospital, Santa Monica, Calif., intern training; Julio A. Ortiz, Freedmen's Hospital, Washington, D. C., intern training; Robert G. Rodriguez, St. Mary's Hospital, Philadelphia, intern training; Jean Brunkow, University of Colorado Medical Center, Denver, poliomyelitis course, and Second Lieutenant Barbara Ricker, University of Colorado Medical Center, Denver, course on poliomyelitis.

ADVANCED TRAINING IN CIVILIAN INSTITUTIONS

The following medical officers have been accepted for training in the civilian medical schools and hospitals indicated: Lieut. Col. Theodore E. Fischer, basic science, Georgetown University, Washington, D. C.; Major Gerald M. McDonnel, atomic medicine, University of Rochester, N. Y.; Lieuts. Joshua C. Bray, intern training, Abingdon Memorial Hospital, Abingdon, Va.; Robert H. Reid, intern training, New Haven Community Hospital, Conn.; Boyd C. Hindall, intern training, University of Minnesota Hospital, Minneapolis; William H. Sellors, intern training, Shadyside Hospital, Pittsburgh; Darrell J. Holman, intern training, Los Angeles County Hospital, Los Angeles; Raymond C. Mellinger, intern training, Henry Ford Hospital, Detroit; George W. Weber, intern training, Community General Hospital, Reading, Pa.; Moses M. Hartman, intern training, Community General Hospital, Reading, Pa., and Oliver R. Buesing, surgery, Emory University, Emory, Ga.

CERTIFICATIONS BY AMERICAN BOARDS

Eight additional Regular Army medical officers have recently been certified by American Boards. They are: Brig. Gen. Leonard D. Heaton, general surgery; Col. Oral B. Bolibaugh, orthopedic surgery; Lieut. Col. Edward A. Cleve, internal medicine; Lieut. Col. Richard L. Crone, internal medicine; Lieut. Col. Hugh W. Jones, Pathologic Anatomy and Clinical Pathology; Lieut. Col. Ryle A. Radke, internal medicine; Lieut. Col. Jack W. Schwartz, urology, and Major Jack H. Bristow, ophthalmology.

VISITORS AT MEDICAL MUSEUM

The Army Medical Museum of the Army Institute of Pathology, Washington, D. C., reports a record attendance of 3,041 visitors for Labor Day week end, which brings the total attendance of visitors for the last sixteen months to more than 175,000.

INSTITUTE OF PATHOLOGY

Dr. Arthur T. Hertig, Boston, delivered a special lecture on "Classification and Biological Behavior of Hydatid Moles" at the Army Institute of Pathology, Washington, D. C., September 24.

PERSONALS

Major Gen. John M. Willis, M. C., retired, has accepted a position as superintendent of Hamot Hospital at Erie, Pa. During the recent war General Willis was commanding officer of Camp Grant and the training school there for medical corpsmen and, after that assignment, served in the Pacific area.

The Surgeon General of the Army has appointed Dr. Ebbe C. Hoff, associate professor of neurophysiology at the Medical College of Virginia, Richmond, a member of a committee of consultants to advise on the indexing of medical literature. The committee will be under the direction of Dr. Lewis H. Weed, head of the committee on medical research of the National Research Council.

NAVY

NEW NAVY INTERNS

The following recent medical school graduates have accepted nominations as lieutenants (jg) in the Medical Corps Reserve under the Navy's Medical Intern Training Program. On completion of their internships, these young doctors will serve on active duty in the Navy: George F. Asbury, Kent, Wash., to King County Hospital, Seattle; Arthur F. Boon, Grand Haven, Mich., to Detroit Receiving Hospital, Detroit; William W. Drummy Jr., Omaha, to Boston City Hospital, Boston; William J. Dunn, Wilmette, Ill., to Philadelphia General Hospital, Philadelphia; Edward A. Felder, Norwich, Conn., to Delaware Hospital, Inc., Wilmington, Del.; George R. Hanson, Nampa, Idaho, to St. Luke's Hospital, Denver; Saul I. Harrison, New York, to Western Pennsylvania Hospital, Pittsburgh; Robert C. Hastedt, Harrisburg, Pa., to George F. Geisinger Memorial Hospital, Danville, Pa.; George J. Haupt, Pittsburgh, to Jefferson Hospital, Philadelphia; Robert E. Herndon, Seminole, Okla., to St. Luke's Hospital, St. Louis; Harold H. Hopper, Monrovia, Calif., to Jefferson Hospital, Philadelphia; Robert W. Johnson, Alliance, Neb., to St. Luke's Hospital, Denver; Erling P. O. Larson, Davenport, Iowa, to City Hospital, St. Louis; Henry Litvin, Philadelphia, to Philadelphia General Hospital, Philadelphia; Paul T. Luckenbill, Kutztown, Pa., to University of Kansas Medical Center, Kansas City, Kan.; Joseph A. Mayer, Salt Lake City, to Holy Cross Hospital, Salt Lake City; Floy J. Moore, Moundsville, W. Va., to Presbyterian Hospital, Chicago; John P. Morris, Scarsdale, N. Y., to Grasslands Hospital, Valhalla, N. Y.; John A. Owen Jr., South Boston, Va., to Cincinnati General Hospital, Cincinnati, and Charles R. Propst, Sumter, S. C., to Philadelphia General Hospital, Philadelphia.

POSTGRADUATE INSTRUCTION

The following medical officers of the Regular Navy have been nominated to attend postgraduate instruction at the institutions indicated: Comdr. John D. Walters, residency in dermatology and syphilology, University of Pennsylvania Graduate School of Medicine, Philadelphia; Lieut. Comdr. George W. Russell, fellowship in surgery, Georgetown University Hospital, Washington, D. C.; Lieuts. Henry G. Gardiner Jr., instruction in neuropsychiatry, University of Texas Medical Branch, Galveston; Walter H. Jarvis Jr., residency in general practice, Naval Hospital, Portsmouth, Va.; Lieuts. (jg) Raleigh M. Hood, residency in surgery, Naval Hospital, San Diego, Calif.; William K. Woodard, residency in pediatrics, Naval Hospital, Chelsea, Mass.

PERSONALS

Lieutenants (jg) George T. Van Petten and Burton Willard have recently transferred from active Reserve status to the Medical Corps of the Regular Navy.

Dr. Friedrich P. Ellinger of Koenigsberg, Germany, has joined the staff of the Research Institute at the Naval Medical Center, Bethesda, Md., as the technical director of research in radiation biology. Dr. Ellinger came to the United States in 1938 and has been director of the Laboratory for Experimental Radiation Therapy Research at Long Island College of Medicine and consultant in radiology in charge of research at the United States Veterans Hospital, Bronx, N. Y.

Captain Henry D. Hubbard, MC, has been assigned to London, England, as staff Medical Officer, United States Naval Forces, Eastern Atlantic and Mediterranean.

MISCELLANEOUS

VANNEVAR BUSH RESIGNS

Vannevar Bush has resigned as chairman of the Research and Development Board of the National Military Establishment and will be succeeded in that position by Dr. Karl T. Compton, president of Massachusetts Institute of Technology. Dr. Bush received a master of science degree from Tufts College and has received honorary degrees from numerous other institutions of learning. He has been a teacher at his alma mater and at the Massachusetts Institute of Technology, and since 1939 he has been president of the Carnegie Institution of Washington. He is a trustee of Johns Hopkins University, a life member of the Massachusetts Institute of Technology Corporation, regent of the Smithsonian Institute; chairman of the National Defense Research Commission and, since 1941, director of the Office of Scientific Research and Development.

Dr. Compton is a graduate of Wooster College, Wooster, Ohio, and received his Ph.D. from Princeton University in 1912 and has received honorary degrees from many colleges and universities. He has been chairman of the Nutrition Foundation since 1941, a trustee of the Memorial Foundation for Neuro-Endocrine Research of Boston since 1932 and Brookings Institute since 1940. He was chairman of the United States Radar mission to the United Kingdom and a member of several special advisory committees on the atomic bomb. He has been president of the Massachusetts Institute of Technology since 1930.

MEDICAL SCIENCES COMMITTEE APPROVES THREE PANELS

The Committee on Medical Sciences of the Research and Development Board, National Military Establishment, has set up three panels: aviation medicine, shipboard and submarine medicine, and military and field medicine. The panel on aviation medicine will be under the direction of E. J. Baldes, Ph.D., chairman of the Division of Physics and Biophysical Research, Mayo Clinic, Rochester, Minn. This panel will study medical problems involved in crash and safety programs and aviation physiology and will correlate activities of existing military and civilian laboratories in its field. The panel on shipboard and submarine medicine will be under the direction of Dr. E. J. DuBois, professor of physiology at Cornell University School of Medicine, New York. This panel will study methods of protection against undesirable conditions, means of increasing efficiency of personnel and treatment of conditions peculiar to shipboard and submarine operations, as well as the evaluation of factors influencing human function under environmental conditions related to the operation of ships and submarines.

A chairman has not yet been selected for the panel on military and field medicine, which will be responsible for coordination of research in medical and allied sciences concerned with support of troops under field conditions and will study problems related to hospitals, dispensaries and disaster situations.

The chairman of the Medical Sciences Committee is Dr. Francis C. Blake, who has just announced the appointment of Major General Malcolm C. Grow, the Air Surgeon, as Air Force representative on the committee.

MASS BCG VACCINATION IN EUROPE

The United Nations International Children's Emergency Fund contemplates tuberculin testing 40 to 50 million children in Europe and offering vaccination to all who are found uninfected by the tubercle bacillus. The Children's Fund has already allocated $4,000,000 for the work, and the program will begin shortly under the sponsorship of the World Health Organization, the Danish Red Cross and other Scandinavian Red Cross chapters, and UNICEF. On October 2, Drs. Carroll E. Palmer and Lydia B. Edwards, Senior Surgeons of the United States Public Health Service, left New York for Paris to consult with Dr. Johannes Holm, director of the vaccination program, on the research implications of the undertaking. After completion of the European program, similar undertakings may be made in China, Southeast Asia, Latin America, Algeria, Tunisia and Morocco.

Medical News

(Physicians will confer a favor by sending for this department items of news of general interest: such as relate to society activities, new hospitals, education and public health. Programs should be received at least two weeks before the date of meeting.)

CONNECTICUT

State Hospital Appointments.—Dr. Ronald H. Kettle was appointed superintendent of the Norwich State Hospital, effective August 25. He has been acting superintendent since July 1948, when Dr. Riley H. Guthrie resigned. Dr. Conrad O. Ranger was appointed clinical director of the hospital beginning October 1. He has been consultant for the Veterans Administration at Manchester, N. H.

Research in Electroencephalography.—The Institute of Living at New Haven announces the appointment of Charles E. Henry, Ph.D., Chicago, to direct the expanded research program in electroencephalography and allied studies. Dr. Henry comes to Hartford from the Institute for Juvenile Research in Chicago. He was in charge of the electroencephalographic program for the Navy at Newport. Before his military service he had taught at Western Reserve University, Cleveland, and the State University of Iowa, Iowa City, and had been associated with the Bradley Home and School for Children in Providence, R. I.

ILLINOIS

Personal.—Dr. Maurice Lev, director of research in the department of pathology at Michael Reese Hospital, has been appointed assistant professor of pathology at the University of Illinois College of Medicine. Dr. Lev is a graduate of Creighton University School of Medicine, Omaha, 1934.

First State Tuberculosis Sanatorium.—Ground-breaking ceremonies marking the beginning of the first state hospital for the care of tuberculous patients were held at Mt. Vernon October 15. The sanatorium is to be constructed under the state-federal hospital construction program. Known as the Mt. Vernon State Tuberculosis Sanitarium, it will have a capacity of one hundred beds. Representatives of the Illinois State Medical Society, Illinois Hospital Association and the Illinois Tuberculosis Association, members of the state advisory council on hospitals, county sanatorium boards, local health, welfare and tuberculosis associations and the general public attended.

Chicago

Varicose Veins and Epilepsy.—The North Shore Branch of the Chicago Medical Society, meeting on November 2 at the Edgewater Beach Hotel, will hear Dr. Geza De Takats, University of Illinois, speak on the treatment of varicose veins. Dr. Frederick A. Gibbs, also of the University of Illinois, will speak on "Psychomotor Epilepsy."

Address by Dr. Dittrick.—Dr. Howard Dittrick, associate professor of medical history, Frank E. Bunts Educational Institute, Cleveland, will address a joint meeting of the Institute of Medicine of Chicago and the Society of Medical History of Chicago in the assembly room of the institute, John Crerar Library Building, November 19, on "Temple to Hospital in Care of the Sick."

Course in Endocrinology.—The American College of Surgeons is offering a course in endocrinology at La Salle Hotel, Chicago, November 1-6, which will present a review of recent developments in the field of endocrinology by leading teachers in the United States and Canada. The fee is $30 for members and $60 for nonmembers. The course is under the direction of Dr. Willard O. Thompson, clinical professor of medicine, University of Illinois College of Medicine.

INDIANA

Dr. Shumacker to Head Surgical Department.—Dr. Harris B. Shumacker Jr., associate professor of surgery at Yale University School of Medicine, New Haven, Conn., has been appointed professor and chairman of the department of surgery at the Indiana University School of Medicine, Bloomington-Indianapolis. Dr. Shumacker received his M.D. degree from Johns Hopkins University School of Medicine, Baltimore, 1932. He was assistant resident in surgery, obstetrics and gynecology at the New Haven (Conn.) Hospital in 1936, and was made resident surgeon the following year. He was an instructor in surgery in 1937-1938 at Yale University and from 1931 to 1948 at Johns Hopkins School of Medicine. He became an associate professor of surgery in 1946. During World War II he served as surgeon with the 118th General Hospital.

IDAHO

State Medical Election.—At the annual meeting of the Idaho State Medical Association, July 5-8, Dr. Franklin B. Jeppesen, Boise, became president and Dr. Walter R. West, Idaho Falls, president-elect; Dr. Alfred L. Popma, Boise, was named secretary-treasurer.

MAINE

State Clinical Meeting.—The Maine Medical Association will hold its clinical session at the Eastland Hotel, Portland, November 1-2. Clinics will be held at the Maine General Hospital, the Maine Eye and Ear Infirmary and Mercy Hospital. A symposium on cancer will be held Tuesday afternoon. Out of state speakers will be Dr. Grantley W. Taylor, Boston, "What Can Be Accomplished in Cancer Therapy," and Dr. T. Duckett Jones, Boston, speaking on "Rheumatic Fever" at the banquet Monday night.

MINNESOTA

Litzenberg Lectures.—The Minnesota Medical Foundation announces the establishment of the Litzenberg Lectures in honor of the late Dr. Jennings C. Litzenberg, formerly head of the department of obstetrics and gynecology at the University of Minnesota Medical School. The first lecture was given October 22 at the university by Dr. Everett D. Plass, of the State University of Iowa College of Medicine, Iowa City, on "Advances in Maternal Welfare."

MISSOURI

Jackson County Health Forum.—The Jackson County Health Forum sponsored by St. Luke's, St. Joseph, St. Mary's, Menorah and Trinity Lutheran hospitals, and approved by the Jackson County Medical Society, opened its twelfth season of lectures in the Municipal Auditorium, Kansas City, September 15. On October 20 the lecture was "A New World for the Hard of Hearing" by Dr. George E. Shambaugh Jr., Chicago; on November 17 Dr. Bayard T. Horton, Rochester, Minn., will speak on "Migraine Headaches"; on January 12, Dr. Cyril M. MacBryde, St. Louis, will lecture on "Modern Trends in Diabetic Treatment." These free lectures are open to the public; they are on the third Wednesday night of each month September through April, with the exception of December.

MISSISSIPPI

Student Loans.—Medical students interested in loans from the State Medical Education Board to become effective at mid-year have until December 1 to make their applications. They must have completed premedical college work and be accepted for enrolment in a class A medical school. On September 25 the State Medical Education Board had granted loans to 144 young men and women of Mississippi who are attending 24 medical schools throughout the nation.

NEW YORK

Rochester Academy Lectures.—On October 5 the Rochester Academy of Medicine began its annual series of lectures, which will continue on the first Tuesday of each succeeding month through May. The next four lectures are:

Nov. 16, Winslow T. Tompkins, Philadelphia, Nutrition and Pregnancy.
Dec. 7, I. Arthur Mirsky, Cincinnati, Ohio, Diabetes.
Jan. 4, Charles R. Allison and Elmer O'Brien, Rochester, and William G. Farlow, Coldwater, Symposium on Bronchiectasis.
Feb. 1, Milton J. E. Senn, New York, Child Psychology.

Postgraduate Instruction.—The Medical Society of the State of New York with the cooperation of the New York State Department of Health has arranged a lecture for the Jefferson County Medical Society at the Hotel Woodruff, Watertown, November 11, 8 p. m. Dr. Harry A. Steckel, Syracuse, will speak on "Psychosomatic Medicine." For the Lewis County Medical Society Dr. Steckel will lecture on "Alcoholism as a Medical Problem" at the St. Peter's Chuch, Lowville, November 4 at 8 p. m.

New York City

Physicians Art Club.—The New York Physicians Art Club held its sixteenth exhibition at the New York Academy of Medicine October 20-29. The academy is not open on Saturday or Sunday. There were no jury of awards and no prizes. The public was invited to the exhibition.

Courses in Diseases of the Chest.—A postgraduate course in Diseases of the Chest will be given at the Hotel New Yorker, November 8-13 under the sponsorship of the American College of Chest Physicians and with the cooperation of members of the staffs of the New York City medical schools and hospitals. Morning and afternoon sessions and luncheon round table discussions will be held. Application should be made to the American College of Chest Physicians, 500 North Dearborn St., Chicago 10. The fee is $50.

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Clinical Session on Chronic Pulmonary Diseases.—The Tuberculosis Sanatorium Conference of Metropolitan New York will hold a clinical session on chronic pulmonary diseases at the Cornell University Medical College Amphitheatre, November 10, at 8:15 p. m. A panel discussion will be held on "Bed Rest in the Treatment of Tuberculosis." Dr. Carl Muschenheim will be the moderator.

Public Health Week.—The Beth-El Hospital, Brooklyn, will conduct its annual Public Health Week for the Laity November 8-11. The following topics will be considered:

Nov. 8, The Rh Factor, by Dr. Philip Levine, New York.
Nov. 9, Diabetes, by Dr. Benjamin I. Ashe, New York.
Nov. 10, Rheumatic Fever, by Dr. Leo M. Taran, Brooklyn.
Nov. 11, Menopause, by Dr. Isadore C. Rubin, New York.

The meeting of November 8 will be held at the Hebrew Educational Alliance; those of November 9 and 10 at the Brooklyn Jewish Center, and that of November 11 at the East Midwood Jewish Center in Brooklyn. All meetings will begin at 8:30.

Twenty-Third Series of Friday Afternoon Lectures.—The New York Academy of Medicine is sponsoring its twenty-third series of Friday Afternoon Lectures open to the medical profession and to medical students at 4:30 beginning November 5 and extending through April 8. The program for the rest of this year is as follows:

Nov. 5, E. Jefferson Browder, New York, Pain in the Low Back with Radiation into the Lower Extremity.
Nov. 12, Harry Most, New York, The A. Walter Suiter Lecture, Tropical Diseases in Daily Practice in New York City.
Nov. 19, Walter T. Dannreuther, New York, Ectopic Pregnancy.
Dec. 3, Sam Granick, Ph.D., New York, Iron Metabolism and Hemochromatosis.
Dec. 17, Harold A. Abramson, New York, Asthma.

OHIO

Professor LeBlanc Dies.—Thomas J. LeBlanc, Sc.D., head of department of preventive medicine, University of Cincinnati College of Medicine, died September 9 at Christian R. Holmes Hospital. Dr. LeBlanc was a fellow in 1920 of the Rockefeller Institute, served with U. S. Public Health Service 1924-1925 and had been a member of the faculty of the university since 1925.

BCG Vaccination.—The Academy of Medicine of Cleveland has approved the use of BCG vaccine in the central area of Cleveland. At present, students in the School of Medicine of Western Reserve University and in the nursing schools of several hospitals are being vaccinated. Only persons with no evidence of tuberculosis are to be vaccinated. The work is under the direction of the city commissioner of health and the controller of tuberculosis. U. S. Public Health Service officials are giving technical assistance.

OREGON

Course in Allergy.—A fall graduate instructional course in allergy will be given at the University of Oregon Medical School, Portland, November 8-12 in cooperation with the American College of Allergists. Subjects for lectures are: fundamentals of allergy and miscellaneous manifestations, gastrointestinal and food allergy, dermatologic allergy, miscellaneous manifestations of allergy and respiratory and miscellaneous allergies. The fee for the course is $75, payable at the medical school registration desk. Applications can be secured by writing Dr. Fred W. Wittich, The American College of Allergists, 423 LaSalle Medical Building, Minneapolis 2, Minn.

SOUTH CAROLINA

Portrait of Dr. Barron.—A portrait of Dr. William R. Barron ,Columbia, was unveiled August 6 in the new wing of the South Carolina Baptist Hospital. The portrait was provided by fellow members of the Columbia Medical Society of Richland County and close friends. Dr. Barron, now retired, practiced for many years in Columbia.

Alumni Postgraduate Seminar.—The Alumni Association of the Medical College of the State of South Carolina will hold a seminar at the college November 2-4. The speakers will be:

R. Glenwood Spurling, Louisville, Ky., Lumbar Intervertebral Disc Lesions.
Alexander Brunschwig, New York, Some Very Favorable Results in the Treatment of Advanced, So-Called Inoperable, Abdominal Carcinoma.
John B. McKittrick, Boston, Surgery in the Diabetic.
Allan M. Butler, Boston, Treatment of Diarrheal Disease in Infancy.
Paul Titus, Pittsburgh, Research in Obstetrics and Gynecology.
Emmett D. Colvin, Atlanta, Management of Prolonged Labor Due to Uterine Inertia.
Wallace M. Yater, Washington, D. C., Coronary Artery Disease.
Edgar Hull, New Orleans, The Diagnosis and Treatment of Peptic Ulcer.
Shields Warren, Boston, Diagnostic and Therapeutic Use of Radioactive Isotopes.

At the Founders' Day Banquet November 4 Dr. Warren will speak on "The Atomic Age in Medicine."

TENNESSEE

Additional Radioisotope Courses.—The Oak Ridge Institute of Nuclear Studies will offer four additional courses in technics of using radioisotopes in research this fall and winter. New courses and priority of attendance are: Oct. 25, industrial laboratories; Jan. 3, 1949, government laboratories; Feb. 14, 1949, medical personnel, and March 14, 1949, no priority assigned. The four week courses are designed to teach scientists how to apply radioisotopes in their own research safely. Participants are selected by the institute with the assistance of the Isotopes Division and the Division of Biology and Medicine of the Atomic Energy Commission, and preference is given to persons who are almost ready to use radioisotopes in their research. The courses are about two thirds laboratory work and one third lecture and seminars. For further information write the institute at P.O. Box 117, Oak Ridge.

Circuit Postgraduate Instruction in Cancer.—Dr. Lyndon E. Lee Jr. of the University of Michigan, Ann Arbor, is continuing the postgraduate instruction courses in cancer begun a year ago by the Tennessee State Medical Association, the Tennessee Division of the American Cancer Society, the State Department of Public Health, Vanderbilt University School of Medicine, Nashville, and the University of Tennessee College of Medicine, Memphis. He is giving ten week courses to five groups in east Tennessee in a circuit known as Sweetwater Valley, where two hundred and fifty-three doctors are enrolled. The program has another nine months to function. In the first year Dr. Lee covered twenty-five teaching centers and about fifty counties, where five hundred and eighteen physicians were enrolled. On completion of this circuit, the state medical association hopes to open immediately a two year program on "Psychiatry, as Applied to the Practice of Medicine." Any medical school or hospital that will grant a leave of absence to a physicain qualified to give this course should communicate with Dr. T. S. Hill, co-chairman, Postgraduate Committee, Gailor Memorial Psychiatric Hospital, Memphis 7.

TEXAS

Dr. DeBakey Appointed Professor of Surgery.—Dr. Michael E. DeBakey, associate professor of surgery at Tulane University of Louisiana School of Medicine, New Orleans, has been appointed Judson L. Taylor professor of surgery at Baylor University College of Medicine, Houston. Dr. DeBakey was born in Lake Charles, La., 1908, is a graduate of Tulane and has been on the staff of Touro Infirmary and visiting surgeon at Charity and Mercy hospitals in New Orleans. He is the author or co-author, chiefly with Dr. Alton Ochsner, of numerous surgical papers. During the war he served in the general surgery branch, Surgical Consultants Division, office of the Surgeon General. He has lately been appointed a member of the medical advisory committee of the National Security Resources Board.

WASHINGTON

Poliomyelitis Centers in Eleven Cities.—The State Medical Advisory Committee on Poliomyelitis has approved a plan for the development of "Polio Centers" in eleven cities within the state to aid in the management of local outbreaks of poliomyelitis. The committee, representing various medical, hospital, nursing and similar associations of the state, and serving in an advisory capacity to the State Department of Health and the National Foundation for Infantile Paralysis, will develop and promote the plan. The centers are to have one or more hospitals equipped with special facilities and trained personnel to take care of patients with poliomyelitis.

PUERTO RICO

Examine Imported Flour.—The Department of Health of Puerto Rico has announced that all imports of wheat flour into the island will be examined to determine whether additional vitamins and minerals have been added, as provided by Act no. 182, approved May 12 by the Insular Legislature. Wholesale merchants were given an opportunity up to October 1 to dispose of their stocks of nonenriched flour.

First Tuberculosis Hospital.—Dr. E. Garrido Morales, medical consultant, U. S. Public Health Service in San Juan, speaking before a Tuberculosis Institute, October 3, reported that Puerto Rico needs 11,191 hospital beds; the island has only 2,254, 1,892 of which are operated by the government and 362 by private institutions. The first tuberculosis hospital to be constructed with federal and insular funds will be located at Rico Piedras and will have an eight hundred bed capacity. It is being constructed at a cost of over $2,000,000. There are twenty-two tuberculosis centers established on the island as compared to 5 in 1935. The work on these centers is performed under the supervision of tuberculosis specialists with fluoroscope equipment and, in the majority of the centers, x-ray equipment.

GENERAL

Annual Meeting of Special Society.—The annual meeting of the American Otorhinologic Society for the Advancement of Plastic and Reconstructive Surgery will be held at the Hotel Waldorf Astoria, New York, on Thursday, November 4. A testimonial dinner will be held at 6 p. m. for Dr. Samuel Fomon, New York, honorary president, who will speak on "Recent Development in Rhinoplastic Surgery Based on New Physiologic Concepts."

Anesthesiologists Meeting.—The American Society of Anesthesiologists will hold its annual meeting at the Statler Hotel, St. Louis, November 3-6, under the presidency of Dr. Charles F. McCuskey, Los Angeles. The scientific program, beginning November 5, includes symposiums on recent developments affecting anesthesiologists; the practice of anesthesiology; blood; blood substitutes; supportive therapy and associated pathology, and anesthesia and related problems in infants and children.

Poliomyelitis Declines Sharply.—The U. S. Public Health Service reports a decrease of 321 cases of poliomyelitis during the week ended October 9 as compared with the preceding week, the sharpest weekly decline this year. A total of 1,208 cases was reported for the week, as compared with 1,529 for the previous week, 1,142 in 1946 and a five year median of 6.89 for the corresponding week. The week's report brings the total to October 9 to 20,387, as compared with 19,644 in 1946 and a five year median of 10,296. The total for the entire year 1946 was 25,698. The following states have reported more than 1,000 cases to date: California 3,512, North Carolina 2,293, Texas 1,520 and New York 1,145.

Meeting of Association of Medical Colleges.—The annual meeting of the Association of American Medical Colleges will be held at the Hotel Greenbrier, White Sulphur Springs, W. Va., November 8-10. Among the speakers will be:

Cassius S. Van Slyke, Bethesda, Md., Relation of National Heart Act to the Medical Schools.
Stafford L. Warren, Los Angeles, Role of Biophysics in Medical Education.
Walter A. Bloedorn, Washington, D. C., Financial Aid to Medical Education.
Donald Slaughter, Vermillion, S. D., Clinical Clerkships for Sophomore Medical Students.

Major General Lewis B. Hershey, Washington, D. C., will give the dinner address.

Meeting of Radiological Society.—The annual meeting of the Radiological Society of North America will be held at the Fairmont Hotel, San Francisco, December 5-10 under the presidency of Dr. Leo H. Garland, San Francisco. Refresher courses on radiologic diagnosis and treatment and symposiums are included in the program. Among the speakers will be Drs. Fuller Albright, Boston; James F. Brailsford, Birmingham, England; William E. Chamberlain, Philadelphia; S. de Rienzo, Cordoba, Argentina; J. Frimann-Dahl, Oslo, Norway; J. W. Meredith, Manchester, England, and Raoul Pereiras, Havana, Cuba, and Hermann J. Muller, Sc.D., Indiana University, Bloomington. Dr. Merrill Sosman, Boston, will give the annual society lecture.

International Congress of Radiology.—The next International Congress of Radiology will be held in London in the summer of 1950, under the presidency of Dr. Ralston Paterson, Manchester. The officers for the congress are: President, Dr. J. Ralston Paterson, Manchester; president emeritus, Dr. Alfred E. Barclay, Oxford; treasurer, Dr. H. Graham Hodgson, London; secretary-general, Dr. John W. McLaren, London. All recognized radiologic societies are being asked to supply a list of their members, and full details will be sent to each radiologist and published as soon as possible. An office for the congress has been established at 45 Lincoln's Inn Fields, London, W.C. 2.

Horace Wells Memorial Volume.—A 500 page book, "Horace Wells, Dentist; Father of Surgical Anesthesia," edited by Dr. William J. Gies, Columbia University, New York, will be ready for sale and distribution some time this month. As a centenary commemoration, the volume preserves and clarifies the origination and evolution of general surgical anesthesia. It presents the "proceedings of the centenary commemoration of Wells' discovery in 1844 and lists of Wells memorabilia, including bibliographies, memorials and testimonials." It may be obtained from Dr. Eugene M. Clifford, chairman, Horace Wells Centenary Committee, 57 Pratt Street, Hartford, Conn.

Control of New Synthetic Drugs.—The General Assembly of the United Nations on October 8 unanimously approved a draft of the protocol for the control of new types of synthetic drugs that have been discovered and manufacturered since 1931. The document will be submitted to the various governments and will become effective thirty days after twenty-five or more of them have approved it. The signers must include, according to the *New York Times*, at least five of the group of nations that signed the 1931 convention for limiting the manufacture and regulating the distribution of narcotic drugs at the League of Nations in Geneva. While it is believed that the governments of the fifty-eight member states will sign the protocol, the document can be renounced after five years "by an instrument in writing deposited with the Secretary General of the United Nations."

Quincy Kiwanis Foundation.—Dr. Harold Swanberg, Quincy, Ill., editor of the *Mississippi Valley Medical Journal*, has set up a trust, organized not for pecuniary profit, that will enable the Kiwanis Club of Quincy "to sponsor, undertake, or aid in one or more things of, a charitable, scientific, literary, or educational nature, which will bring public honor and respect to Kiwanis." This trust is being administered by a board of trustees, at least one of whom must be a physician. Contributions may be made by an individual to the foundation, which the trustees have named the "Swanberg Kiwanis Foundation." Dr. Swanberg, who contributed $1,000 to the foundation and has agreed to make further contributions as income permits, is the only member of the Kiwanis Club of Quincy who has twice served as club president. The trustees have approved a hearing conservation program for school children of Quincy and Adams County as the first project of the foundation.

Executive Director of National Health Council.—Dr. Thomas D. Dublin, professor of preventive medicine and community health, Long Island College of Medicine, has been appointed executive director of the National Health Council, a nonprofit organization of national voluntary health agencies. Its aim is to prevent diseases and maintain health through a common plan of action of its members and the development of a widespread citizens' participation in health measures. Dr. Dublin, a graduate of Harvard Medical School, received his doctorate in public health from Johns Hopkins School of Hygiene and Public Health. He has served on the staff of the New York State Department of Health, has taught at Albany (N. Y.) Medical College and was a special lecturer at the DeLamar Institute of Public Health, Columbia University. The Rockefeller Foundation has made a grant of $225,000 to the National Health Council, to be used over a three year period.

Academy of Dermatology and Syphilology.—The annual meeting of the American Academy of Dermatology and Syphilology will be held in Chicago December 4-9 under the presidency of Dr. Clyde L. Cummer, Cleveland. The principal sessions will be held at the Palmer House, with special courses in histopathology and mycology scheduled for December 4 and 5 at the medical schools of the University of Illinois and Northwestern University. Teaching clinics will be held on the afternoons of Monday, Tuesday and Wednesday. Informal discussion groups will meet at noon and at 5 p. m. sessions. Special courses in histopathology, mycology, roentgen ray and radium therapy, mucous membrane lesions, bacteriology of the skin, industrial dermatoses, specific granulomas and dermatoscleroses will be held under leaders in these various fields. Special lectures will be given on: "Certain Aspects of Blood Dyscrasias of Special Interest to Dermatologists," by Dr. Cyrus C. Sturgis, University of Michigan Medical School, Ann Arbor; "The Relation of Endocrines to Cutaneous Diseases," by Dr. Arthur A. Hellbaum and E. C. Keaty, University of Oklahoma School of Medicine, Oklahoma City.

Marriages

Mitchell S. Matuszko, Amherst, Mass., to Miss Shirley Lorraine Parmington of Rochester, N. Y., June 11.

Irvin Harrison Trincher, Emory University, Ga., to Mrs. Margaret Vaughn Weatherly of Atlanta, in June.

Edwin Pearson Parker III, Washington, D. C., to Miss Mary Elizabeth Neff of Richmond, Va., June 19.

Willis M. Sprinkle, Marion, Va., to Miss Irma Chappell of Miami, Fla., in New York, June 27.

Samuel E. Reiter, Sunmount, N. Y., to Miss Adele P. Seigel at Lake Placid, June 6.

James J. Grace, Montrose, Pa., to Miss Frances G. Thornton at Wilkes-Barre, June 19.

Richard W. Heffner, Cleveland, to Miss Carol Albrecht in Madison, Wis., June 20.

William Chin to Miss Nancy Abbott Wong, both of Washington, D. C., June 27.

John E. Schults, Brooklyn, to Miss Carol Saums of Garden City, N. Y., June 26.

Deaths

James Alexander Miller ● New York; born in Roselle, N. J., March 27, 1874; Columbia University College of Physicians and Surgeons, New York, 1899; professor of clinical medicine at his alma mater from 1913 to 1945; specialist certified by the American Board of Internal Medicine; member of the American Trudeau Society, American Association of Thoracic Surgery, Association of American Physicians and the American Clinical and Climatological Association; a founder, past president and member of the board of directors of the New York Tuberculosis and Health Association; past president of the National Tuberculosis Association, which in May 1944 awarded him the Trudeau Medal; past president of the American College of Physicians; past president and since 1904 a fellow of the New York Academy of Medicine, serving since 1911 as a member of its committee on public relations; in 1947 received the Academy Medal as a "distinguished medical scientist in recognition of outstanding service to humanity"; during World War I he held the rank of major and served with the American Red Cross in France; for two years medical director of the Rockefeller Tuberculosis Commission in France; received the Chevalier Legion d'Honneur; in 1930 was appointed a special deputy health commissioner, serving as a consultant on tuberculosis, and later was appointed administrative consultant in tuberculosis to the city department of hospitals; in 1948 appointed to the joint administrative board of the Columbia-Presbyterian Medical Center; in a consultant physician capacity worked for many years with the tuberculosis division at Bellevue Hospital in New York, House of Rest at Sprain Ridge, Yonkers, and Trudeau (N. Y.) Sanatorium; in 1930 received the doctor of science and in 1937 the doctor of public health degree from New York University; alumni trustee, Columbia University; author of numerous contributions to medical literature on chronic pulmonary disease, particularly tuberculosis; contributor to Musser's "Internal Medicine"; died in Black Point, Conn., July 29, aged 74, of pancreatitis.

Jennings Crawford Litzenberg ● Minneapolis; born in Waubeek, Iowa, April 6, 1870; University of Minnesota College of Medicine and Surgery, Minneapolis, 1899; studied in Vienna, Berlin, London, Glasgow and Dublin; joined the faculty of his alma mater as an instructor in obstetrics in 1901, assistant professor from 1907 to 1910, associate professor of obstetrics and gynecology from 1910 to 1914, professor and head of the department from 1914 to 1938, when he retired with the rank of professor emeritus; formerly professor of obstetrics and gynecology at the graduate school; specialist certified by the American Board of Obstetrics and Gynecology, of which he had been a member; past president, vice president and in 1920 a member of the council of the American Gynecological Society; past president of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons, Hennepin County Medical Society, Minnesota Academy of Medicine and Central Association of Obstetricians and Gynecologists; honorary fellow of the Washington Gynecological Society; fellow of the American College of Surgeons; member of the House of Delegates in 1924, 1925, and from 1927 to 1929, and chairman of the Section on Obstetrics, Gynecology and Abdominal Surgery, 1927-1928, American Medical Association; the Minnesota Medical Foundation recently established the Litzenberg Lecture in his honor; served on the staffs of the Nicollet Clinic, Fairview Hospital, University Hospital, Northwestern Hospital and Eitel Hospital, where he died August 15, aged 78, of coronary sclerosis.

William Hayes Breuer ● St. James, Mo.; born in St. James, Mo., Oct. 19, 1876; Beaumont Hospital Medical College, St. Louis, 1898; served as president of the Missouri State Medical Association and councilor of the twenty-sixth district; president of the Phelps-Crawford-Dent-Pulaski Counties Medical Society; member of the House of Delegates of the American Medical Association in 1934, 1935, 1936 and 1937; an officer during World War I; served as mayor; formerly health commissioner of the city of St. James; affiliated with the State Federal Soldiers Home Hospital; on the staff of Waynesville (Mo.) General Hospital; served as president of the Phelps County Historical Society and for many years as president of the Chamber of Commerce; died July 16, aged 71, of coronary occlusion.

Arthur Chalmers Martin ● Old Westbury, N. Y.; born in Shelter Island, N. Y., June 6, 1887; Cornell University Medical College, New York, 1908; specialist certified by the American Board of Obstetrics and Gynecology, Inc.; fellow of the American College of Surgeons; past president of the Nassau County Medical Society, Nassau County Surgical Society and the Nassau County Obstetrical Society; member of the Brooklyn Gynecological Society; attached to the British Army serving overseas during World War I; attached to Nassau Hospital, Mineola, Huntington (N. Y.) Hospital, North Country Community Hospital in Glen Cove and Meadowbrook Hospital in Hempstead; died July 28, aged 61, of chronic cardiovascular renal disease.

Stephen Clifford McCoy, Louisville, Ky.; born Jan. 3, 1873; Southwestern Homeopathic Medical College and Hospital, Louisville, 1901; Kentucky University Medical Department, Louisville, 1906; member of the American Urological Association and the American Medical Association; fellow of the American College of Surgeons; served during World War I; formerly affiliated with the U. S. Public Health Service; at one time on the faculty of the University of Louisville School of Medicine; on the staffs of Louisville City Hospital, St. Anthony's Hospital and St. Joseph Infirmary, where he died July 14, aged 75, of cerebral hemorrhage.

Robert Orton Moody, Berkeley, Calif.; born in Buffalo, N. Y., Oct. 18, 1864; Yale University School of Medicine, New Haven, Conn., 1894; joined the faculty of the University of California Medical School in 1901 and in 1935 retired with the rank of professor emeritus of anatomy; member of the American Microscopical Society and the American Association of Anatomists; fellow of the American Association for the Advancement of Science; in 1911 was honored with the title of Officer de L'Instruction Publique by the French government; died in the Alta Bates Hospital July 28, aged 83, of bronchopneumonia and arteriosclerotic heart disease.

James Ross Clemens, Webster Groves, Mo., born in St. Louis, Sept. 19, 1866; L.S.A., 1900, L.R.C.P., London and M.R.C.S., England, 1901; professor emeritus of pediatrics at St. Louis University School of Medicine; at one time dean at the Creighton University Medical College in Omaha; member of the American Medical Association; served during World War I; in 1935 winner of the prize for play offered by One-Act Theatre in London, England; in 1937 received second prize from the Oxford University Press for plays suitable for English schools; died in St. Mary's Hospital, St. Louis, July 18, aged 82, of heart disease.

John Barr McAlister ● Harrisburg, Pa.; born in Carroll County, Md., Jan. 31, 1864; University of Pennsylvania Department of Medicine, Philadelphia, 1887; member of the House of Delegates of the American Medical Association in 1909, 1914, 1928 and 1931; fellow of the American College of Physicians; past president of the Medical Society of the State of Pennsylvania, Dauphin County Medical Society and the Harrisburg Academy of Medicine; for many years affiliated with Harrisburg Hospital; chairman of the board of trustees of the Gettysburg (Pa.) College; died July 22, aged 84, of chronic nephritis and uremia.

Frederick William Krueger, Jacksonville, Fla.; born in Hille, Westphalia, Germany, Oct. 17, 1896; University of Nebraska College of Medicine, Omaha, 1926; served during World War I; member of the American Association of Industrial and Railway Surgeons and the Florida Association of Industrial and Railway Surgeons; on the staff of St. Luke's Hospital; a member of the visiting staffs of St. Vincent's, Brewster and Duval County hospitals; trustee, Newberry College, Newberry, S. C., and the Florida Naval Academy, St. Augustine; died July 6, aged 51, of acute coronary heart disease.

Harry Merrill Brown, Indianapolis; Indiana University School of Medicine, Indianapolis, 1939; member of the American Medical Association; served an internship and residency at the Indianapolis City Hospital; deputy coroner; a captain in the medical corps, Army of the United States, received the Bronze Star for performing outstanding services as chief of the eye, ear, nose and throat service in a hospital while a prisoner of war in Japanese Prison Camp No. 1, Cabanatuan, Philippine Islands during World War II; killed in an automobile accident, July 2, aged 33.

Eugene M. Austin, Tupper Lake, N. Y.; Albany (N. Y.) Medical College, 1887; member of the American Medical Association; for many years school physician and health officer; affiliated with the Mercy General Hospital, where he died July 21, aged 82, of multiple sclerosis, and fracture of the hip received when he fell out of bed.

Frederick Amos Baldwin, Kansas City, Mo.; University of Michigan Department of Medicine and Surgery, Ann Arbor, 1898; member of the American Medical Association; at one time on the faculty of the Baylor University College of Medicine in Dallas, Texas; died in the Research Hospital, July 13, aged 71, of uremia and prostatic hypertrophy.

Daniel Delos Comstock ● Los Angeles; American Medical Missionary College, Battle Creek, Mich., and Chicago, 1906; served as clinical professor of medicine at the College of Medical Evangelists; specialist certified by the American Board of Internal Medicine; fellow of the American College of Physicians; from 1910 to 1917 superintendent of the Glendale (Calif.) Sanitarium and Hospital; on the staffs of the White Memorial and Los Angeles County General hospitals; died in Oakland, Md., July 30, aged 68, of coronary thrombosis.

Edwin Joseph Cornish, Dunsmuir, Calif.; Rush Medical College, Chicago, 1902; formerly affiliated with Dunsmuir Hospital; died in Southern Pacific Hospital, San Francisco, July 22, aged 73, of carcinoma of the prostate.

Hoagland Cook Davis ● Baltimore; North Carolina Medical College, Charlotte, 1901; University of Maryland School of Medicine, Baltimore, 1902; fellow of the American College of Surgeons; served on the faculty of the Johns Hopkins University School of Medicine; affiliated with the John Hopkins Hospital, Sydenham Hospital, Hospital for Women of Maryland, Union Memorial Hospital, Bon Secours Hospital and the Church Home and Infirmary; died July 31, aged 69, of carcinoma.

William Insco Dean ● Rochester, N. Y.; University of Buffalo School of Medicine, 1902; past president of the Monroe County Medical Society; fellow of the American College of Surgeons; veteran of the Spanish-American War; on an examining board during World War I; affiliated with the Highland Hospital, Iola-Monroe County Tuberculosis Sanatorium, Monroe County Hospital and the Rochester State Hospital; physician for the Rochester Police Department; died July 18, aged 71, of cerebral hemorrhage.

John Leonard Edmondson, Stella, Mo.; University Medical College of Kansas City, 1909; member of the American Medical Association; died in O'Reiley Veterans Administration Hospital in Springfield, July 22, aged 64, of a fungous infection.

Emile Ehlert, Water Proof, La.; Medical Department of Tulane University of Louisiana, New Orleans, 1904; died July 16, aged 69, of injuries received in an automobile accident.

Anthony William Ferrara, Callicoon Center, N. Y.; University of Vermont College of Medicine, Burlington, 1925; died July 31, aged 51, of coronary thrombosis.

Aaron Billings Gates, Greenwich, Conn.; Long Island College Hospital, Brooklyn, 1912; member of the American Medical Association and the American Society of Anesthesiologists; for many years affiliated with Greenwich Hospital; died July 9, aged 66, of coronary thrombosis.

Antonio Giorgi ● Gary, Ind. (licensed in Indiana in 1911); served as a member of the board of the Central State Hospital in Indianapolis; died July 30, aged 85, of coronary occlusion.

James Goodfriend, St. Louis; Northwestern University Medical School, Chicago, 1940; interned at the Michael Reese Hospital in Chicago, where he served a residency in pediatrics; formerly a resident in pediatrics at the Cook County Hospital in Chicago; instructor in pediatrics at the Washington University School of Medicine; specialist certified by the American Board of Pediatrics; served during World War II; on the staff of St. Louis Children's Hospital; died July 5, aged 34, of heart disease.

William Augustus Harris, Savannah, Ga.; College of Physicians and Surgeons, Boston, 1905; served during World War I; superintendent of the Charity Hospital; died July 21, aged 70.

Calvin McCoy Harrison, Dallas, Texas; University of Louisville (Ky.) Medical Department, 1885; died June 6, aged 88, of coronary insufficiency.

Vernon Garold Jeurink ● Denver; University of Colorado School of Medicine, Denver, 1927; secretary of the American Proctologic Society, of which he was president-elect; fellow of the American College of Surgeons; specialist certified by the American Board of Surgery; affiliated with Children's Hospital, Denver General Hospital and St. Luke's Hospital, where he died July 6, aged 45, of bronchogenic carcinoma.

Walter Frederick Johnson ● New York; Jefferson Medical College of Philadelphia, 1924; member of the Medical Society of the State of Pennsylvania; specialist certified by the American Board of Ophthalmology; on the staff of the New York Eye and Ear Infirmary; died July 13, aged 49, of coronary sclerosis.

Thomas Alfred Jones, Menard, Ill.; Marion-Sims College of Medicine, St. Louis, 1897; member of the American Medical Association; served as superintendent of the general hospital and head of the medical department of the Southern Illinois Penitentiary; died in Evanston, July 3, aged 79, of carcinoma of the sigmoid.

Harry Katz, New York; University of Illinois College of Medicine, Chicago, 1916; served during World War I; died in Michael Reese Hospital, Chicago, July 20, aged 54, of lymphosarcoma and pneumonia.

Robert Floyd Lamberton ● Denver; Cleveland Homeopathic Medical College, 1903; an Affiliate Fellow of the American Medical Association; served during World War I; died in St. Joseph's Hospital July 12, aged 69, of carcinoma of the prostate.

Alfred Joseph Mascia, New York; Columbia University College of Physicians and Surgeons, New York, 1945; interned at Morrisania City Hospital; certified by the National Board of Medical Examiners; entered the medical corps, Army of the United States, in April 1947 as a first lieutenant; service terminated in December 1947 with the rank of captain; died July 18, aged 27.

William Houston Moore ● Wilmington, N. C.; Jefferson Medical College of Philadelphia, 1910; past president and for many years a member of the state board of medical examiners; past president of the New Hanover County Medical Society; served as councilor of the Third District of the Medical Society of the State of North Carolina; member of the city planning board; for many years a member of the city-county consolidated board of health; affiliated with the James Walker Memorial Hospital; died July 23, aged 68, of heart disease.

James A. Morford, Grantsville, W. Va.; University of Louisville (Ky.) Medical Department, 1909; county health officer; served as a member of the Calhoun County Court and one term as a member of the West Virginia House of Delegates from Calhoun County; member of the board of directors of the Calhoun County Bank; died July 21, aged 67, of circulatory failure, secondary to cerebral hemorrhage.

Victor Campbell Myers, Lansing, Mich.; Creighton University School of Medicine, Omaha, 1940; assistant director, Bureau of Industrial Health, Michigan Department of Health; killed July 30, aged 34, in an automobile accident.

Gussie Annice Niles, Salem, Ore.; University of Oregon Medical School, Portland, 1935; member of the American Medical Association; secretary of the Marion-Polk Counties Medical Society; affiliated with the Salem Deaconess Hospital; died July 9, aged 52, of cerebral hemorrhage.

Major Norvel Pannell, Philadelphia; College of Physicians and Surgeons, Boston, 1906; for many years affiliated with the Frederick Douglass Memorial Hospital; on the staff of Phipps Institute; died July 8, aged 70, of endocarditis.

Frank Adrian Pearl, Los Angeles; Howard University College of Medicine, Washington, D. C., 1912; served during World War I; died July 24, aged 61, of cerebral thrombosis.

Bruce Reed Pearson, Salt Lake City; Stanford University School of Medicine, San Francisco, 1932; member of the American Medical Association; specialist certified by the American Board of Internal Medicine; served during World War II; on the staff of St. Mark's Hospital; died July 16, aged 44, of heart disease.

Earl Fray Peinert ● Columbus, Ohio; Ohio State University College of Medicine, Columbus, 1916; served overseas during World War I; for many years affiliated with St. Francis Hospital and Grant Hospital, where he died July 8, aged 57, of arteriosclerotic heart disease.

John Lee Riley, Snow Hill, Md.; University of Maryland School of Medicine, Baltimore, 1905; served as a member of the county board of education, as county jail physician and deputy medical examiner for Worcester County; a medical examiner for the Selective Service during world wars I and II; formerly a member of the board of medical examiners; president and director of the First National Bank and for many years director of the Snow Hill Building and Loan Association; died July 24, aged 73, of carcinoma of the colon.

Charles Wallace Sale ● Colonel, U. S. Army, retired, Fredericksburg, Va.; University College of Medicine, Richmond, 1907; fellow of the American College of Physicians; in September 1917 entered the medical corps of the U. S. Army as a first lieutenant; promoted through the various ranks; in August 1937 became a lieutenant colonel and in August 1943 a colonel; served during world wars I and II; retired May 31, 1946 for disability in line of duty; died in the Mary Washington Hospital July 9, aged 63, of cerebral hemorrhage.

Clyde Wilfred Sample, Wilkinsburg, Pa.; Hahnemann Medical College and Hospital of Philadelphia, 1903; served during World War I; on the staffs of Homeopathic Hospital and Shadyside Hospital, where he died July 19, aged 70, of coronary occlusion.

Harry Edward Schilling, Cincinnati; Miami Medical College, Cincinnati, 1909; died July 4, aged 74.

Foreign Letters

LONDON

(From Our Regular Correspondent)

Sept. 25, 1948.

British Commonwealth Medical Conference

Doctors from all parts of the British Commonwealth met at the House of the British Medical Association to discuss the formation of a British Commonwealth Conference. Most of them had attended the meeting of the World Medical Association at Geneva, but the proposed conference is in no way an offset of this. There is already a close medical connection between Britain and the Dominions. From the most distant parts doctors come here for postgraduate training. The Dominions have branches of the British Medical Association or form national medical associations affiliated with it. But these connections have grown up spontaneously, without any attempt being made to incorporate the various bodies into one organization. For two days the means of promoting greater cooperation were discussed by representatives of the national medical associations of Australia, Canada, Ceylon, Eire, Great Britain, India, New Zealand, Pakistan, South Africa and Southern Rhodesia. It is proposed that an annual conference of representatives of national medical associations be held in conjunction, when possible, with the annual meeting of the association of the host country. It is proposed that the conference should last three days and that two representatives from each country should attend. The first meeting is to be held at Saskatoon, Canada, in June 1949, to be presided over by Dr. J. F. C. Anderson, president-elect of the Canadian Medical Association. In 1950 it is hoped that the conference will be held in Brisbane, Australia, and in 1951 in South Africa.

The inclusion of India and Pakistan in the conference is particularly interesting. They have exercised the option given to them to become independent, instead of a Dominion, of the British Commonwealth. But they owe modern medicine entirely to Britain, which established medical schools where 60,000 Indian graduates have been trained. At international conferences the fluent command of the English language by Indians has been noteworthy. They come to Britain in increasing numbers for postgraduate instruction. India may feel satisfaction at her political independence, but for modern culture she remains dependent on Britain. Nowhere is this more obvious than in the case of medicine. She continues to publish medical journals in English. If, as some imagine, the English language is destined in time to become the language of the world, it is exhilarating to think that medicine will play no small part in its diffusion and in the cementing of international relations.

Unexplained Deaths While Bathing

A doctor wrote to the *Lancet* (**2**:312 [Aug. 21] 1948) a letter giving his experience as an explanation of some of the unexpected deaths which occur during bathing. While in his bath he felt as if he were suddenly cut nearly in two by something from behind. For ten minutes he lay in the bath paralyzed and nearly fainting with pain. Had he been in deep water he certainly would have died. This letter evoked one from Dr. F. Parkes Weber, a well known authority on rare diseases, who gave a very different explanation of such deaths (*Lancet* **2**:396 [Sept. 4] 1948). He said that there has often been uncertainty about the cause of deaths while bathing and that those who have recovered from an attack which apparently would have been fatal, had it occurred while swimming in deep water, can help to throw light on the subject, as the preceding correspondent has done. He cites the personal experience of a German writer, Dr. J. P. zum Busch, which suggests that a kind of giant urticaria and faintness following immersion in cold water may be explained by the release of a histamine-like substance in the skin and subcutaneous tissue, which, if too much gets into the general circulation, may cause fainting. He refers to the teaching of Langdon-Brown: "Every known protein contains histidine. Break off a single carbon dioxide molecule from this histidine and it becomes a powerfully toxic substance, histamine. This substance when liberated from the tissue cells can produce all the phenomena of allergy." Histamine applied to the skin promptly raises an urticarial wheal. Injected subcutaneously into animals it produces a condition like anaphylactic shock. But the problem remains how a substance toxic to all becomes liberated in the tissues of some in answer to stimuli quite harmless to every one else.

Damages for Meningitis Following Spinal Anesthesia

In April of last year the High Court awarded damages of $48,000 to a young man who contracted meningitis after a spinal injection of nupercaine hydrochloride and was left with permanent paralysis of both legs and incontinence of urine. The damages were given against the Portsmouth Corporation, in whose hospital the operation took place, but a simultaneous claim against the practitioners concerned was not granted. The corporation appealed against the verdict on the grounds that the judge had disregarded the evidence that infection with Pseudomonas pyocyanea could have occurred in spite of proper precautions to prevent this.

Giving judgment in the Court of Appeal, Lord Justice Bucknill said that there was sufficient evidence that the plaintiff's injury was due to an injection of nupercaine hydrochloride into the spinal canal. This introduced a bacillus which caused meningitis. The disease was due to negligence and breach of duty by the corporation's servants in failing to carry out proper antiseptic precautions. There was no satisfactory evidence that the syringe had been sterilized in accordance with the usual practice obtaining in the hospital. He therefore dismissed the appeal.

THE NETHERLANDS

(From Our Regular Correspondent)

Sept. 27, 1948.

Historic Days

The Dutch medical journals reflect the historic events of these days: Queen Wilhelmina's jubilee, Her Majesty's abdication and the inauguration of Queen Juliana. They gratefully remember the warm interest shown by the members of the royal family in public health and medical care.

Editorials point out that during the reign of Queen Wilhelmina the population nearly doubled and the general mortality, tuberculosis and infant mortality were among the lowest of the world.

Professor Van Loghem, chief editor of the leading Dutch medical journal, the *Nederlandsch Tijdschrift voor Geneeskunde*, emphasizes that public health is the outcome of many forces: the average standard of living in Holland has very much improved, especially since World War I; illiteracy gradually disappeared; as a result of social insurance against invalidism, illness, accidents, unemployment, pauperism and intemperance ceased to be problems; before the war the standard of housing became rather high; there was a rapid development in the field of industrial hygiene, and the "Cross-Societies" did excellent work for the organization of medical prevention.

In Holland tuberculosis mortality showed itself an exceedingly sensitive reactor to prosperity, especially nutrition. Even during World War I, when the Netherlands did not suffer from hostilities, the number of cases of tuberculosis increased because of the relative scarcity of food.

The figures of infant mortality in Holland were remarkably low before World War II. In fifty years they had come down from 16 to 3.4 per cent (1939). During the first years of the war they did not react to war conditions; even in the impoverished Dutch family the baby was safe. During the terrible winter of 1944-1945 there was a sharp increase in infant mortality; but, even at its height, it remained far below the average of fifty years ago.

In these historic days the improvement of health in the Dutch Indies during half a century of Dutch colonial government is mentioned more than once. During the week of festivities the Indian (formerly Colonial) Institute in Amsterdam—itself a center of scientific activities—organized a large meeting of scientific workers in the colonial field.

Professor Swellengrebel, malariologist, gave an impressive sketch of the development of tropical hygiene, sanitary organization and medical care on Sumatra and Java. The cause of beriberi was discovered by Eijkman in the Institute of Pathology in Batavia, and in the same Institute Grijns founded vitaminology. The campaigns against smallpox, plague, malaria, ancylostomiasis and yaws are internationally recognized as object lessons in epidemiology. The hygienic experiences and experiments in the tobacco and rubber plantations on Sumatra eliminated the tropical climate as a factor of disease and proved that even a collectivity of Chinese coolies may reach an European level of public health.

Professor Swellengrebel also mentioned the development of Javanese colonizations on Sumatra before the war. Their sanitary conditions had reached a high European standard. Not only were they characterized by good hospitals and special measures against special diseases, but they were also provided with all that was necessary for hygienic environment (housing, drinking water, sewage and food) and submitted to a system of medical prevention (including antenatal care, baby clinics, compulsory treatment of school children).

At the same time the Civil Medical Service was reorganized as a Public Health Service by Dr. De Vogel. The new organization decentralized medical care, and exploration and prevention were the first items on its central program.

PARIS

(From Our Regular Correspondent)

Sept. 22, 1948.

The Point of View of Forensic Doctors

At the Lausanne International Congress for legal medicine last May, as a consequence of a communication of Professors Delay and Desclaux, a commission was appointed and has proposed to this society the following resolution: "That the use of methods of investigation of the subconscious, such as pharmacodynamic explorations with pentothal, be, in principle, authorised in legal medicine, with a purely medical aim and as a mean of diagnosis. But the expert shall not take into consideration the revelation obtained on the materiality of facts under the influence of those substances. In this manner, the establishment of the responsibility will not, in any case, be based on this examination only, the interpretation of which demands a critical analysis by the expert doctor. Moreover it is recommended to make use of these methods only when current means of investigation have failed." Professors C. Richet and H. Desoille, commissioned by the General Assembly of deported and interned doctors of the Resistance, have given another opinion to the Society for Legal Medicine. They declared as inadmissible the exploration of the subconscious of an accused, whom the French law presumes to be innocent, with the help of pharmacodynamic means of the pentothal sodium ® type. They protested against such methods in the name of their comrades who fought for individual liberty and who were subjected to the Gestapo methods of interrogation.

Franco-British Convention on Social Security

Mr. J. Griffiths, British Minister for Social Insurances, and Mr. Daniel Mayer, French Minister for Labor, signed on June 11 a convention establishing the reciprocity of the social security services between Great Britain and France. As from July 5, all contributions paid either in France or in Great Britain are taken into account in the other country, and will permit the patient to receive allowances for illness, inability to work, maternity and occupational accidents; it entitles him, according to cases, to à superannuation or widowhood pension, and this either in France or in England. Up to the present, when a British laborer came to work in France, or inversely, he lost the rights acquired in his original country by the contributions paid to the respective social insurance fund. As to the superannuation pension, and according to the new convention, each of the two countries will be responsible for the payment of a part of the pension in proportion to the period during which contributions shall have been paid to its own insurance system. The convention comprises special provisions for British officials on duty in France and vice versa.

BRAZIL

(From Our Regular Correspondent)

São Paulo, Oct. 4, 1948.

Study of 1,000 Cases of Dementia Paralytica

The first group of patients with dementia paralytica admitted to the Hospital Juqueri, a state hospital near São Paulo, was studied by Drs. Cyriaco Amaral Filho and Waldemar Cardoso. The average age at the time of infection was 23 years and 3 months and at the onset of dementia paralytica was about 38 years and 5 months. The incubation period among 373 known cases varied from five to twenty years; the average incubation period was fourteen years and five months. The older the patient at the time of infection the earlier was the onset of the dementia paralytica.

In treatment, Plasmodium vivax was used, administered intravenously. Receptivity to P. vivax was about 90.0 per cent among whites, 76.3 per cent among mulattoes and 30.4 per cent among Negroes. The incidence of improvement following treatment was about 36.0 per cent, recorded as follows: complete recovery, 14.1 per cent; social recovery, 13.0 per cent, and improvement, 8.7 per cent. The total mortality rate with malaria therapy was 10 per cent; in prodromal cases, the minimal rate of 1.8 per cent was found, the major incidence occurring in the confusional variety with 15.8 per cent of deaths.

The results of treatment with malaria were better when the duration of the illness had been short. Thus, prodromal cases reached the remarkable rate of 81.0 per cent of recoveries; in patients ill less than six months, the total incidence of recoveries was about 50.0 per cent. The expansive form of the disease showed the best results, while the confusional form was less affected by treatment.

Negroes were the least benefited by malaria treatment, which is due to their natural immunity against infection with P. vivax. Their incidence of recoveries did not exceed 20.0 per cent, while that of white patients reached 41.0 per cent. The therapeutic results were best after 11 to 13 paroxysms. Patients who were uninfluenced by malaria were then treated with pyretotherapy, with an incidence of 30.0 per cent of good results. Pyretotherapy was also carried out in cases in which malaria inoculation failed to induce a sufficient number of paroxysms. Normal cerebrospinal fluid was found in 1.0 per cent of 514 cases studied. The coincidence of a positive Wassermann reaction in both the cerebrospinal fluid and the blood serum was found in 95.3 per cent. Reversal to normal cerebrospinal fluid reactions occurred only after one year of treatment, while clinical improvement was evident after a few months of treatment. The total incidence of deaths was about 53.0 per cent, one half of which occurred within the first six months after admission.

Bureau of Legal Medicine and Legislation

MEDICOLEGAL ABSTRACTS

Medical Practice Acts: Federal Court Jurisdiction Over Matters Already Determined by State Court.—The New Jersey chiropractic association, and an individual chiropractor, and the New Jersey naturopathic society, and an individual naturopath, in two separate suits against the state board of medical examiners and the Attorney General of New Jersey, sought to have a declaratory judgment entered adjudicating as unconstitutional certain portions of the New Jersey medical practice act. The plaintiffs also sought a temporary injunction to stay certain criminal proceedings against the individual plaintiffs until the issues were determined and asked that a three judge court be convened to enter the temporary injunction. The defendants moved to set aside the service of the summons and the complaints and to dismiss each of the causes thereof. A consolidated argument on behalf of all plaintiffs was reduced to one brief, the defendants filed a brief covering both cases and the plaintiffs submitted a consolidated reply brief. The motion was argued in the district court, D., New Jersey.

Stripped to their essentials, the court said, the allegations of the plaintiffs resolve themselves primarily into the following constitutional issues in which the plaintiffs challenge: (1) the right of the State of New Jersey to define the scope of what constitutes the practice of medicine in the manner in which it has done so, (2) the right of the State of New Jersey to control the practice of medicine by means of its licensing system, (3) the right of the State of New Jersey to determine the accreditation to and the regulation of the schools located within its boundaries concerned with instruction in the healing arts, (4) the right of the State of New Jersey to authorize its state board of medical examiners, in the manner in which it has done so, to establish the standards by which schools instructing in the healing arts will be accredited, applicants for licenses to practice the healing arts are to be rated and to initiate legal actions on behalf of the state if such regulations as established by the state board are violated and (5) the right of the State of New Jersey to try alleged violators of statutes and regulations so established without a jury.

In the absence of diversity of citizenship, said the court, it is essential that a substantial federal question be presented in order to give the federal court jurisdiction. This court is therefore confronted with the necessity in this case of determining whether the plaintiffs have raised a substantial question under the federal constitution which has not been ruled on by the United States Supreme Court, since no diversity of citizenship exists.

Decisions of the United States Supreme Court involving the same or sufficiently analogous questions as those raised by the plaintiffs in this case were then cited and discussed in some detail, and the court decided that in the light of such decisions the plaintiff's attack on the New Jersey medical practice act appears to raise no substantial question that their rights under the federal constitution are being violated. Furthermore, the court said that the State of New Jersey had established direct, positive and definite standards for the practice of medicine and the allied healing arts consistent with its police power as a state.

The plaintiffs contended that by virtue of the decision in a prior New Jersey case (*State Board of Medical Examiners v. Grossman*, 52 A. (2d) 699), interpreting the general clauses of the medical practice act denying the right to trial by jury, the State of New Jersey has deprived them of their right to trial by jury under the federal constitution. The cases cited by the plaintiffs, said the court, are inapplicable, since they refer to the right to trial by jury in federal courts where federal statutes or rules of court are involved. Where the right is invoked under a constitutional statute of a state, the court continued, it has been ruled that trial by jury may be modified by a state or abolished altogether. Again, said the court, the plaintiffs have failed to present a substantial federal question for consideration of the court because prior decisions of the United States Supreme Court have foreclosed this subject.

The plaintiffs next attacked the New Jersey medical school licensing act which provides (N.J.S.A. 18:20-18), "No school or college shall be conducted within this state for the purpose of training or qualifying students to practice medicine or surgery or any branch thereof or any method of treatment of disease or any abnormal physical condition without first securing from the state board of medical examiners a license authorizing it so to do." This act, the plaintiffs insisted, is unconstitutional because "no schools for naturopaths or chiropractors may be maintained in the State of New Jersey. . . . They alleged that a school for instruction in chiropracty was attempted to be organized but that it had been closed as a result of activities on the part of the authorities of the State of New Jersey. They insisted that it is the right of the people of the state to be given the opportunity to study the sciences of naturopathy and chiropracty and that, since such schools are private in nature, the state has no power to interfere with such schools. On the basis of prior cases, said the court, it appears abundantly clear that a state may set reasonable standards by way of educational requirements, examinations, etc., for the determination of the qualifications of those who hold themselves out to the public as practitioners of any form of treatment of disease or abnormal physical condition. Furthermore, a state has the right to grant to an administrative body the authority to regulate those standards fixed by the statute. If it is a fact that the standards set by the State of New Jersey have so far deterred the establishment of schools for chiropracty and naturopathy, as alleged by the plaintiffs, it is equally true that no group in the field of medicine and surgery has satisfied the statute for no such college or school exists in this state. In any event, said the court, the pleadings contain no allegations that any of the plaintiffs have applied for a license to establish a school and have been denied such a permit.

There remains then for determination, continued the court, whether the complaints allege facts to constitute a cause of action under the civil rights statute. To warrant a cause of action under this statute there must be allegations of a violation or denial, under color of "any statute, ordinance, regulation, custom, or usage," of some right granted by the federal constitution. Have the defendants acted in an unconstitutional manner or have they administered the medical practice act or the medical school licensing act in an unconstitutional manner? That the arts of chiropracty and naturopathy involve the practice of certain forms of treatment of some disease or abnormalities, organic or functional, of the human body is not contested by the plaintiffs. They assert, however, that it is unnecessary in their practice to qualify themselves in such subjects as surgery, materia medica, etc., as the statute and regulations of New Jersey now generally require of all who would practice "any method of treatment of human ailment, disease, pain, injury, deformity, mental or physical condition." They contend that their form of practice should be recognized apart from the general practice of medicine and surgery and that the failure of such recognition constitutes discrimination against them which oppressively deprives them of their right to exercise freedom in offering to administer their forms of therapy to the public. The State of New Jersey through its agencies, said the court, has deemed it appropriate that everyone who desires to practice "any method of treatment of human ailment, disease, pain, injury, deformity, mental or physical condition" shall be confronted with uniform requirements regardless of what forms of therapy, he proposes to administer. There is no showing that the laws and regulations or the administration thereof have been bent to adversely affect the right of the plaintiffs in these cases or the classes some of them hold themselves out to represent. In fact, said the court, in all their details with regard to the prosecution of the individual plaintiffs, the allegations of the complaints fail to show that the defendants have acted other than they are required, if they are to properly execute the mandates of the laws and regulations they are bound to administer. As a result there is left no valid charge of purposeful or intentional discrimination and the causes of action under the civil right statute must fall.

Furthermore, the court concluded, the plaintiffs may not convert this federal court into an appellate forum to pass on the merits of legislation rather than to contest such controversies in the state court system with appeal directly to the United States Supreme Court. The federal courts are without jurisdiction to try alleged criminal violations of state statutes. The state courts are the final arbiters of their meaning and appropriate application, subject only to review by this court if such construction or application is appropriately challenged on constitutional grounds.

For the lack of a substantial constitutional question warranting exercise of jurisdiction and failure to state a cause of action or justifiable controversy within the jurisdiction of the court, the motions for a three judge court and for temporary injunctions to stay proceedings in the state court were denied and the plaintiff's complaints dismissed.—*New Jersey Chiropractic Association et al. v. State Board of Medical Examiners; New Jersey Naturopathic Society, et al. v. Same (2 cases) (1948) 79 F. Supp. 327.*

Medical Examinations and Licensure

COMING EXAMINATIONS AND MEETINGS

NATIONAL BOARD OF MEDICAL EXAMINERS

NATIONAL BOARD OF MEDICAL EXAMINERS: *Parts I & II.* Various Centers, Feb., June and Sept. 1949. *Part II.* April, 1949. Exec. Sec., Mr. E. S. Elwood, 225 S. 15th St., Philadelphia 2, Pa. *Part III.* Boston & New York, Nov. 9-11, Sec., Dr. J. S. Rodman, 225 S. 15th St., Philadelphia.

EXAMINING BOARDS IN SPECIALTIES

AMERICAN BOARD OF INTERNAL MEDICINE: *Written.* Oct. 17, 1949. Final date for filing application is May 1. *Oral.* Philadelphia, Nov. 3-5, 1948; San Francisco, date not set. Candidates now eligible for the orals cannot be promised a place in 1949. Sec., Dr. W. A. Werrell, 1 W. Main St., Madison 3, Wis.

AMERICAN BOARD OF NEUROLOGICAL SURGERY: *Oral.* Chicago, June 1949. Final date for filing application is Jan. 1949. Sec., Dr. W. J. German, 310 Cedar Street, New Haven, Conn.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY: *Part I.* Various Centers, Feb. 4, 1949. Final date for filing application is Nov. 1. Sec., Dr. Paul Titus, 1015 Highland Bldg., Pittsburgh 1.

AMERICAN BOARD OF OPHTHALMOLOGY: *Written.* Jan. 14. *Oral.* San Francisco, March 21-24; New York, June 11-15; St. Louis, Oct. 15-19; Boston, Dec. Sec., Dr. S. J. Beach, 56 Ivie Rd., Cape Cottage, Maine.

AMERICAN BOARD OF ORTHOPEDIC SURGERY: *Part I.* Various Centers, April & May. Final date for filing application is Dec. 31. Sec., Dr. Francis M. McKeever, 1136 W. 6th St., Los Angeles 14.

AMERICAN BOARD OF OTOLARYNGOLOGY: New York, Spring, 1949. Sec., Dr. D. M. Lierle, University Hospital, Iowa City.

AMERICAN BOARD OF PEDIATRICS: *Oral.* Atlantic City, Nov. 17-19. Sec., Dr. Lee F. Hill, 718 Royal Union Bldg., Des Moines, Iowa.

AMERICAN BOARD OF PHYSICAL MEDICINE: Atlantic City, June 4-5. Final date for filing application is March 15. Sec., Dr. R. L. Bennett, Georgia Warm Springs Foundation, Warm Springs, Ga.

AMERICAN BOARD OF PLASTIC SURGERY: Examinations are given in June and November of each year in the home town of applicants. Sec., Treas., Dr. Louis T. Byars, 400 Metropolitan Bldg., St. Louis, Mo.

AMERICAN BOARD OF SURGERY: *Written.* Various Centers, March 1949. Final date for filing application is Dec. 1. Sec., Dr. J. S. Rodman 225 S. 15th St., Philadelphia.

AMERICAN BOARD OF UROLOGY: Feb. 1950. Sec., Dr. Harry Culver, 7935 Sunnyside Road, Minneapolis 18, Minn.

BOARDS OF MEDICAL EXAMINERS

ALABAMA: *Examination.* Montgomery, June 28-30, 1949. Sec., Dr. D. G. Gill, 519 Dexter Ave., Montgomery.

ARKANSAS: * Little Rock, Nov. 4-5. Sec., Medical Board of the Arkansas Medical Society, Dr. L. J. Kosminsky, Texarkana. *Eclectic Examination.* Little Rock, Nov. 4. Sec., Dr. C. H. Young, 1415 Main St. Little Rock.

CALIFORNIA: *Oral.* Los Angeles, Nov. 20-21. Sec., Dr. Frederick N. Scatena, 1020 N Street, Sacramento 14.

COLORADO: * Denver, Jan. 4-7. Final date for filing application is Dec. 18. Sec.-Treas., Dr. W. W. King, 831 Republic Bldg., Denver 2.

CONNECTICUT: * *Examination.* Hartford, Nov. 9-10. Sec., Dr. Creighton Barker, 258 Church St., New Haven. *Homeopathic Examination.* Derby, Nov. 9-10. Sec., Dr. J. H. Evans, 1488 Chapel St., New Haven.

DELAWARE: *Examination.* Dover, Jan. 11-13. *Endorsement.* Jan. 20. Sec., Dr. J. S. McDaniel, 229 S. State St., Dover.

FLORIDA: * *Examination.* Jacksonville, Nov. 28-30. Sec., Dr. Frank D. Gray, 12 N. Rosalind Ave., Orlando.

GUAM: *Endorsement.* Agana, Last Friday of each month. Sec., Capt. C. K. Youngkin, Dept. of Public Health, Guam, % F.P.O. San Francisco, Calif.

HAWAII: *Examination.* Honolulu, Jan. 10-13. Sec., Dr. S. E. Doolittle, 881 S. Hotel St., Honolulu 53.

IDAHO: Boise, Jan. 10-12. Dir., Bureau of Occupational Licenses, Miss Estella S. Mullinex, State House, Boise.

INDIANA: *Examination.* Indianapolis, June 1949. Sec., Board of Medical Registration & Examination, Dr. Paul R. Tindall, 416 K. of P. Bldg., Indianapolis.

IOWA: * *Examination.* Des Moines, Dec. 6-8. *Endorsement.* Des Moines, Dec. 6. Sec., Dr. M. A. Royal, 506 Fleming Bldg., Des Moines.

KANSAS: Topeka, Dec. 15-16. Sec., Board of Medical Registration & Examination, Dr. J. F. Hassig, 903 N. 7th St., Kansas City.

KENTUCKY: *Examination.* Louisville, Dec. 13-15. Sec., Dr. Bruce Underwood, 620 S. 3rd St., Louisville 2.

LOUISIANA: *Examination.* New Orleans, Dec. Sec.-Treas., Dr. R. B. Harrison, 1507 Hibernia Bank Bldg., New Orleans 12. *Homeopathic Examination.* Baton Rouge, subject to call. Sec., Dr. F. H. Hardenstein, 715 Pere Marquette Bldg., New Orleans.

MAINE: Portland, Nov. 9-10. Sec., Board of Registration of Medicine, Dr. Adam P. Leighton, 192 State St., Portland.

MARYLAND: *Examination.* Baltimore, Dec. 14-17. *Endorsement.* At the discretion of the Board. Sec., Dr. Lewis P. Gundry, 1215 Cathedral St., Baltimore. *Homeopathic Examination.* Baltimore, Dec. 7-8. Sec., Dr. J. A. Evans, 612 W. 40th St., Baltimore.

MASSACHUSETTS: *Examination.* Boston, Nov. 16-19. Sec., Board of Registration in Medicine, Dr. G. L. Schadt, 413 E. State House, Boston.

MISSISSIPPI: *Reciprocity.* Jackson, Dec. 6. Exec. Officer, State Board of Health, Dr. Felix J. Underwood, Jackson.

MISSOURI: St. Louis, Oct. 25-27. Exec. Sec., Mr. John A. Hailey, P.O. Box 4, Jefferson City, Mo.

NEBRASKA: * *Examination.* Omaha, June. Dir., Bureau of Examining Boards, Mr. Oscar F. Humble, 1009 State Capitol Building, Lincoln 9.

NEVADA: Carson City, Nov. 1. Sec., Dr. G. H. Ross, Industrial Bldg., Carson City.

NEW HAMPSHIRE: Concord, March 10. Sec., Board of Registration in Medicine, Dr. John S. Wheeler, 107 State House, Concord.

NEW YORK: *Examination.* Various Centers, Feb. 1-4. Sec., Dr. J. L. Lochner, Jr., 23 S. Pearl St., Education Bldg., Albany.

NORTH CAROLINA: *Endorsement.* Wilson, Oct. 25. Sec., Dr. Ivan M. Procter, 226 Hillsboro St., Raleigh.

NORTH DAKOTA: *Examination.* Grand Forks, Jan. 4-7. Act. Sec., Dr. C. J. Glaspel, Grafton.

OHIO: *Examination.* Columbus, Dec. 13-15. Sec., Dr. H. M. Platter, 21 W. Broad St., Columbus.

OKLAHOMA: * *Reciprocity.* Oklahoma City, Oct. 24-25. Sec., Dr. Clinton Gallaher, 813 Braniff Bldg., Oklahoma City.

PENNSYLVANIA: *Examination.* Philadelphia, Jan., 1949. Act. Sec., Mrs. M. G. Steiner, 351 Education Bldg., Harrisburg.

SOUTH CAROLINA: *Endorsement.* Dec. 6. Sec., Dr. N. B. Heyward, 1329 Blanding St., Columbia.

SOUTH DAKOTA: * Pierre, Jan. 18-19. Sec., Dr. G. J. Van Heuvelen, Capitol Bldg., Pierre.

TEXAS: Fort Worth, Nov. 4-6. Sec.-Treas., Dr. M. H. Crabb, Medical Arts Bldg., Fort Worth.

UTAH: *Examination.* Salt Lake City, July. Sec., Dept. of Registration, Miss Rena B. Loomis, 324 State Capitol Bldg., Salt Lake City.

VERMONT: *Examination.* Burlington, Feb. Sec., Dr. F. J. Lawliss, Richford.

VIRGIN ISLANDS: *Examination.* Charlotte Amalie, Dec. 8-9. Comm., Dr. Christian R. Moorhead, Charlotte Amalie.

VIRGINIA: *Examination.* Richmond, Dec. 3-4. *Endorsement.* Dec. 2. Sec., Dr. K. D. Graves, 30½ Franklin Road, Roanoke.

WASHINGTON: * Seattle, Jan. Sec., Dept. of Licenses, Miss Virginia Wotherspoon, Olympia.

WISCONSIN: * Madison, Jan. 11-13, 1949. Sec., Dr. C. A. Dawson, Tremont Bldg., River Falls, Wis.

* Basic Science Certificate required.

BOARDS OF EXAMINERS IN THE BASIC SCIENCES

ARIZONA: *Examination.* Tucson, Dec. 21. Sec., Mr. Francis A. Roy, University of Arizona, Tucson.

COLORADO: *Examination.* Denver, Dec. 1-2. Sec., Dr. Esther B. Starks, 1459 Ogden St., Denver 3.

FLORIDA: *Examination.* Gainesville, Nov. 6. Final date for filing application is Oct. 25. Mr. M. W. Emmel, University of Florida, Gainesville.

MICHIGAN: *Examination.* Ann Arbor & Detroit, Jan. 14-15. Sec., Miss Eloise LeBeau, 101 N. Walnut St., Lansing.

MINNESOTA: *Examination.* Jan., April, June and Oct. Sec.-Treas., Dr. Raymond N. Bieter, 105 Millard Hall, Univ. of Minnesota, Minneapolis.

NEW MEXICO: *Examination.* Santa Fe, Nov. 7. Sec., Miss Marguerite Kilkenny, 110 W. Houghton St., Santa Fe.

OKLAHOMA: Spring of 1949. Sec., Dr. Clinton Gallaher, 813 Braniff Bldg., Oklahoma City.

OREGON: *Examination.* Portland, Dec. Sec., Basic Science Examining Committee, Dr. C. D. Byrne, Univ. of Oregon, Eugene.

SOUTH DAKOTA: *Examination.* Vermillion, Dec. 3-4. Sec., Dr. G. M. Evans, Yankton.

TENNESSEE: *Examination.* Memphis, Dec. 30-31. Sec., Dr. O. W. Hyman, 874 Union Avenue, Memphis 3.

WASHINGTON: Seattle, Jan. Sec., Dept. of Licenses, Miss Virginia Wotherspoon, Olympia.

WISCONSIN: *Examination.* Milwaukee, Dec. 4. Final date for filing application is Nov. 27. Sec., Prof. W. H. Barber, Scott & Watson Sts., Ripon.

Current Medical Literature

AMERICAN

The Association library lends periodicals to members of the Association and to individual subscribers in continental United States and Canada for a period of three days. Three journals may be borrowed at a time. Periodicals are available from 1937 to date. Requests for issues of earlier date cannot be filled. Requests should be accompanied by stamps to cover postage (6 cents if one and 18 cents if three periodicals are requested). Periodicals published by the American Medical Association are not available for lending but can be supplied on purchase order. Reprints as a rule are the property of authors and can be obtained for permanent possession only from them.

Titles marked with an asterisk (*) are abstracted below.

American Journal of Public Health, New York

38:761-914 (June) 1948. Partial Index

Air Pollution: Report of Committee on Air Pollution. H. A. Whittaker. —p. 761.

Sanitary Ventilation. W. F. Wells.—p. 775.

*Q Fever in Los Angeles County: Description of Some of Its Epidemiologic Features. C. C. Shepard and R. J. Huebner.—p. 781.

Relative Efficiency of Open and Confidential Method of Reporting Causes of Death. P. H. Jacobson.—p. 789.

Selecting Public Health Personnel Through Examining Processes. Dorothy Deming.—p. 808.

Beginnings of Mental Health Program in State and Local Department of Health. K. A. Zimmerman.—p. 811.

Simple Goiter in Colombia. H. Parra.—p. 820.

Budgets and Expenditures for Dentistry from Maternal and Child Health Funds. J. T. Fulton.—p. 825.

Mass Control of Dental Caries Through Use of Domestic Water Supplies Containing Fluorine. F. S. McKay.—p. 828.

Proposed Report on Educational Qualifications of Community Health Educators. Committee on Professional Education. W. P. Shepard. —p. 843.

Q Fever in Los Angeles County.—Referring to two previous outbreaks of Q fever in the United States, Shepard and Huebner say that infected cattle in Amarillo and infected calves or sheep in Chicago had been the source of human infection. Transmission to slaughter house workers had come from infected tissues and body fluids either by direct contact or by means of droplets of spattered fluids. Ticks had been rarely seen on animals in either of these locations and in Chicago cases developed not so much in workers handling hides, but rather in those coming in contact with viscera. Q fever has been found in an apparently endemic manner in the milk shed area of Los Angeles County. Most of the patients lived near or visited dairies. Serologic studies revealed that many persons who did not give histories of clinical attacks of Q fever showed complement-fixing antibodies for Q fever. Half of the dairy workers and people living near dairies showed specific antibodies. Of 130 samples of serum of cows in the area 21 showed antibodies for Q fever, some in high titer.

Archives of Otolaryngology, Chicago

47:113-238 (Feb.) 1948. Partial Index

Some Clinical Phenomena of Deafness in Light of New and Old Tests of Ear. F. Kobrak.—p. 113.

Progress in Esophagology. P. H. Holinger.—p. 119.

Otolaryngologic Consultant in Compensation and Liability Actions. C. S. Nash.—p. 127.

Management of Esophageal Strictures. C. C. Cody III.—p. 133.

Penicillin and Streptomycin Aerosol in Treatment of Pulmonary Disease. E. W. Hagens, Mary Karp and C. J. Farmer.—p. 138.

Detailed Audiogram. H. A. E. van Dishoeck and J. van Gool.—p. 149.

Otolaryngologic Uses of Soluble Gauze (Oxidized Cellulose). F. D. Woodward and T. Holt.—p. 155.

*Prophylactic Value of Sulfathiazole: Experiment Designed to Test Efficacy of Sulfathiazole Gum in Reducing Bacterial Flora Causing Infectious Pharyngitis. I. S. Neiman.—p. 158.

*Acute Frontal Sinusitis. E. D. Johnson.—p. 165.

Paranasal Sinuses. S. Salinger.—p. 189.

Efficacy of Sulfathiazole Gum in Reducing Bacterial Flora.—The subjects of the experiments reported by Neiman were 199 medical students, who were divided into three groups: Group A chewed one sulfathiazole gum tablet three times daily. Group B chewed one unmedicated gum tablet three times daily. Group C chewed one medicated gum tablet once daily. Each student was instructed to chew the gum tablet at least thirty minutes, preferably longer, before discarding it. Those chewing three a day were asked to chew the first tablet shortly after arising in the morning, the second in the middle of the day and the third before retiring. Those in group C were asked to chew the one tablet shortly before retiring. A detailed record was kept of the incidence of common colds, irritational or secondary pharyngitis and infectious or primary pharyngitis. The author found a diminution in the incidence of primary streptococcic pharyngitis in persons chewing three sulfathiazole gum tablets daily. No cases of sensitization were revealed when sulfathiazole was administered locally in a gum vehicle, as determined by the so-called Leftwich test, nor were any reactions of hypersensitivity reported by the participants.

Acute Frontal Sinusitis.—According to Johnson acute frontal sinusitis is one of the most serious diseases with which the rhinologist has to cope, chiefly because of the serious complications that may develop. The most common one is osteomyelitis of the frontal bone; others are periorbital abscess, epidural abscess, subdural abscess, brain abscess and meningitis. Fortunately, frontal sinusitis is not common. Of the more than 50,000 patients seen in the outpatient department of the Los Angeles General Hospital because of diseases of ear, nose and throat, only 68 had frontal sinusitis requiring that they be hospitalized, and in only 6 of these did osteomyelitis develop. The most common causative factor of frontal sinusitis is infection of the upper respiratory tract; in 47 of the 68 cases studied this was true. In 1 case frontal sinusitis followed measles; in 1, "flu"; in 2 cases it resulted from angina, and in 1 case from allergy. In 7 cases it resulted from swimming, and in 8 cases the cause was undetermined. Staphylococcus aureus appears to be the predominating organism found in the cases of frontal sinusitis. Prominent symptoms are nasal stoppage and pain and tenderness over the frontal area. Local packs of heat or cold and nasal shrinkage may quickly abort the disease. However, the pain over the frontal sinus may become more intense, and swelling may occur, indicating a periosteal involvement. Pitting edema may occur over the frontal bone, extending to the hair line. It is definite then that the patient has osteomyelitis. Increased headache and rise of temperature indicate meningitis, epidural abscess, subdural abscess or brain abscess. Sulfadiazine and penicillin should be administered. If pain and tenderness persist, one should not hesitate to trephine the bone at Ewing's point. If after trephining there are headache and rise of temperature, one should immediately reopen the trephined area, enlarge it sufficiently to expose the inner table and make an opening through this table to uncover a possible epidural or subdural abscess. If penicillin and the sulfonamide drugs do not arrest the progress of osteomyelitis, heroic measures, such as removal of the frontal bone, are considered justified. The author presents 2 case histories.

Blood, New York

3:617-728 (June) 1948

*Exogenous Hemochromatosis Resulting from Blood Transfusions. S. O. Schwartz and S. A. Blumenthal.—p. 617.

Histochemical Methods Applied to Hematology. J. J. Rheingold and G. B. Wislocki.—p. 641.

Clotting of Plasma and Silicone Surfaces. T. B. Patton, A. G. Ware and W. H. Seegers.—p. 656.

Determination of Number of Erythrocytes, Volume of Packed Red Cells, Hemoglobin and Other Hematologic Standards in Mexico City (Altitude, 7,457 Feet). Study Made of 200 Healthy Persons. J. R. Gil and D. G. Teran.—p. 660.

Demonstration and Characterization of the Anti-d Agglutinin and Antigen Predicted by Fisher and Race. S. Haberman, J. M. Hill, B. W. Everist and J. W. Davenport Jr.—p. 682.

Rh Chromosome Frequencies in England. R. R. Race, A. E. Mourant, Sylvia D. Lawler and Ruth Sanger.—p. 689.

Distribution of the Rh Types in São Paulo (Brazil). F. Ottensooser, C. S. Lacaz, H. C. Ferreira and O. Mellone.—p. 696.

Exogenous Hemochromatosis.—Schwartz and Blumenthal cite histories of 5 patients who died as a result of a variety of diseases, all characterized by severe anemia for which numerous transfusions had been given, and in all of whom hemochromatosis developed. Eight similar cases from the literature are summarized. It is postulated that hemochromatosis in these patients is the end result of the deposition and subsequently irritating action of the excess amounts of iron in the parenchy-

matous tissues. The underlying anemia and the not infrequent transfusion reactions are thought to act as predisposing factors for the development of exogenous hemochromatosis. The authors discuss the clinical similarities and dissimilarities and the differences in pathogenesis between exogenous and endogenous hemochromatosis.

Bulletin of Johns Hopkins Hospital, Baltimore

83:583-642 (June) 1948. **Partial Index**

*Viruses and Virus-Like Agents as Causes of Cancer: Brief Recounting and Reflection. J. G. Kidd.—p. 583.
Physiologic Studies in Congenital Heart Disease: V. Circulation in Patients with Isolated Septal Defects. J. C. Handelsman, R. J. Bing, J. A. Campbell and H. E. Griswold.—p. 615.

Viruses as Causes of Cancer.—Kidd reviews the literature on viruses and virus-like agents in relation to cancer, pointing out that it has become widely accepted that further advances in knowledge about cancer will come largely from new discoveries in one or another of the fields of intracellular physiology, chief encouragement being derived from prospects in the study of growth as a phenomenon. During the past few years its causation has been explained theoretically by analogies drawn from a number of rather distant sources. For example, from the hypothesis that plasmagenes are influential in determining the structure and behavior of tissue cells, a number of authors have advanced the supposition that aberrant forms of these conjectural entities may be responsible for cancer, while from the conception that mutant plastids cause variegational diseases and viruses in plants, and from the supposition that all tissue cells harbor ultramicroscopic symbionts analogous to the intracellular "bacteroids" of cockroaches, other authors in turn have assumed that anomalous forms of those entities may cause cancer, and still other essayists have put forth related formulations having points of orientation somewhat less discernible. All of this is mere hypothesis. It is quite conceivable that the viruses may prove increasingly useful as reagents for the study of intracellular processes, both normal and abnormal.

Gastroenterology, Baltimore

10:767-922 (May) 1948

Chronic Ulcerative Colitis. W. L. Palmer.—p. 767.
Prepyloric Spasm Simulating Gastric Malignancy. A. L. Cohn and R. L. Gold.—p. 782.
Significance of Weight Loss as Observed in Gastrointestinal Clinic. C. F. Baumeister and D. D. Darling.—p. 792.
*Peptic Ulcer of Esophagus with Severe Bleeding Controlled by Oxycel. K. B. Castleton and D. A. Dolowitz.—p. 797.
Clinical Use of Needle Biopsy of Liver. R. E. Koch and M. M. Karl.—p. 801.
*Diagnosis of Hemochromatosis by Means of Needle Biopsy of Liver. J. H. Topp and M. C. F. Lindert.—p. 813.
Vitamin A Metabolism in Liver Disease: II. Effect of Bile Acids and Lecithin. D. Adlersberg, Susan Kann, Alice P. Maurer and others.—p. 822.
Comparative Effects of Protein Hydrolysates and Amino Acid Mixtures on Intestinal Motility and Blood Sugar Levels After Rapid Intravenous Injection. A. Sokalchuk, D. Ellis, M. R. Wester and others.—p. 831.
Studies of Effect of Tetraethylammonium Chloride on Gastric Motor and Secretory Function in Patients with Duodenal Ulcers. H. S. Brown, E. L. Posey Jr. and E. E. Gambill.—p. 837.
Pancreatic Calculi. D. Court and N. M. Matheson.—p. 848.
Effects Produced by Perfusion of Jejunum with Histamine and Pilocarpine Stimulated Gastric Juice. J. T. Dameron and O. H. Wangensteen.—p. 859.
Observations on Duodenal Motility in Dogs with Special Reference to Activity During Vomiting. P. D. Mathur, J. H. Grindley and F. C. Mann.—p. 866.
Disappearance of Uropepsin Following Total Gastrectomy. D. C. Balfour Jr., F. W. Preston and J. L. Bollman.—p. 880.

Prepyloric Spasm Simulating Gastric Cancer.—According to Cohn and Gold persistent spasm of the prepyloric or antral region of the stomach occasionally causes difficulty in differentiation from cancer. This area is a common site for cancer as well as spasm. They present the histories of 8 patients in whom prepyloric spasm had to be differentiated from antral cancer. This was accomplished either by clinical observation or surgical exploration. In 4 cases, an organic lesion was demonstrable which could explain the confusing prepyloric spasm. In the first 2 cases, there was a benign gastric ulcer high on the lesser curvature; in the third, a duodenal ulcer, and in the fourth, a malignant gastric ulcer high on the lesser curvature. In the other 4 cases no definite organic lesion was demonstrable to explain the prepyloric spasm simulating cancer. Psychogenic influences were deemed responsible. The authors stress that when a malignant lesion cannot be definitely excluded by all diagnostic aids, exploratory operation is indicated.

Peptic Ulcer of Esophagus.—Castleton and Dolowitz report the case of a man who began to have symptoms of stomach trouble in 1919. The present illness began on May 19, 1947, when he suddenly began to vomit blood. He continued to vomit large quantities of blood and pass numerous tarry stools. He was given several transfusions, but, despite these, each successive blood examination showed a lower hemoglobin and hematocrit reading. On the morning of May 22 he had a hemorrhage which almost exsanguinated him. At emergency surgical intervention no evidence of ulcer could be found. Three days after gastrectomy he was again taken to the operating room and an esophagoscopy was performed. An ulcer was found about 3 cm. from the cardiac orifice at a position of 11 o'clock. At the edge of this ulcer a fair-sized artery was seen spurting blood. A piece of "oxycel" was placed on the ulcer. The "oxycel" promptly turned black and the bleeding stopped. Another piece of "oxycel," rolled into a hollow tube, was inserted into the esophagus in such a manner that its tendency to unroll applied a gentle pressure to the original "oxycel" lying on the ulcer. The scope was then removed. About five weeks later esophagoscopy was again performed. The site of the ulcer was well healed with a small residual scar. The authors believe that local application of "oxycel" or some related substance may be used to control bleeding from esophageal varices as well as from ulcers.

Diagnosis of Hemochromatosis by Means of Needle Biopsy.—According to Topp and Lindert three measures are generally utilized when diagnosis of hemochromatosis is attempted: biopsy of the skin, the intracutaneous ferric chloride test and examination of the urinary sediment for hemosiderin granules in the desquamated tubular cells. In addition, more complicated procedures, such as the determination of blood iron levels and the percentage of iron retained in the body when an accurately calculated diet has been given, have been used. These tests have not been attended by uniformly positive results in known cases. Although the classical clinical features, pigmentation of the skin, enlargement of the liver, diabetes mellitus and genital hypoplasia, should suggest the condition, approximately 20 per cent of the cases lack one or more of these characteristics. One fifth of all the cases of hemochromatosis remain undiagnosed when these conventional methods are used. In an effort to obtain a greater percentage of correct diagnoses the authors employed needle biopsy of the liver in suspected instances. They report 6 cases of hemochromatosis diagnosed by this method. Liver biopsy is a reliable and uniformly accurate means of diagnosing hemochromatosis. This disease entity would be diagnosed more easily and more frequently, if this aid is utilized. Pathogenesis of this condition, as well as of other diseases of the liver, may be clarified by living tissue studies furnished by liver biopsy.

Illinois Medical Journal, Chicago

93:233-284 (May) 1948

Repair of Long Bone Defects with Massive Bone Grafts. C. Senderi.—p. 249.
*Immunization of Children with Influenza Virus Vaccine: Clinical Observations. R. E. Dukes and J. B. Gillespie.—p. 252.
Rhinoplasty Combined with Reconstruction of Receded Chin. O. J. Becker.—p. 254.
Tuberculosis in the Mentally Ill and Defective. M. Pollack, H. Neuer and H. Goldschmidt.—p. 260.
Colonic Diverticula: Review of 234 Cases. F. C. Val Dez, C. S. Gilbert and W. Kash.—p. 269.
Further Clinical Experience with Dolophine. J. J. Jacoby, M. P. Woolf and H. M. Livingstone.—p. 272.
Tooth Pick Perforation of Ileum. F. J. Saletta and G. J. Rukstinat.—p. 276.

Immunization of Children with Influenza Virus Vaccine.—Dukes and Gillespie immunized 100 children with influenza virus vaccine types A and B. In the vaccinated group 42 per cent were between 19 months and 6 years of age, 50 per

cent were between 6 and 10 years of age and 8 per cent were between 10 and 16 years of age. A group similar in number and age distribution served as controls. Immunization consisted of two injections of the vaccine, 0.5 cc. at each injection, and at intervals of one week. Smaller doses were given to 14 children. The incidence of influenza in the immunized and control groups was not unlike except for the youngest age group, in which incidence of influenza was much less frequent in the immunized children. The authors were impressed by the frequency of reactions from the injections and the incidence of rather severe reactions in the younger children. Perhaps a dosage of vaccine dependent on body weight, as with typhoid vaccine, would reduce the number and severity of reactions. Further studies of larger series of children are necessary to evaluate accurately the effectiveness of the vaccine and to determine proper immunizing doses.

Journal of Immunology, Baltimore

59:109-220 (June) 1948. **Partial Index**

Characterization of "Enzymic" Action of Influenza Viruses on Human Red Cells. B. A. Briody.—p. 115.
Tolerance to Toxic Action of Somatic Antigens of Enteric Bacteria. H. R. Morgan.—p. 129.
Inactivation of Influenza Virus by Mercurials and Reactivation by Sodium Thioglycolate and BAL. M. Klein, J. H. Brewer, J. E. Perez and Beatrice Day.—p. 135.
Zone of Activity of Antibodies as Determined by Use of Radioactive Tracers; Zone of Activity of Nephritoxic Antikidney Serum. D. Pressman and G. Keighley.—p. 141.
Epidemic of Influenza A Due to Atypical Strain. Relationship of This Strain to Other Influenza Viruses. S. S. Kalter, O. D. Chapman, Doris A. Feeley and Shirley L. MacDowell.—p. 147.
Incidence of Neutralizing Antibodies for Type A and Type B Influenza Virus in Normal Infants and Children. A. S. Lazarus and R. E. Westfall.—p. 159.
Production of Anti-Haemophilus Influenzae Type b Rabbit Serum. F. D. Eaton, E. G. Gerwe and G. F. Leonard.—p. 165.
Destructive Action of Mouse and Rat Tumor Extracts on Red Blood Cells in Vitro. L. Gross.—p. 173.
Serial Passage of Hodgkin's Disease Tissue Extract in Chicken Eggs. W. L. Bostick.—p. 189.

Journal of International College of Surgeons, Chicago

11:131-242 (March-April) 1948. **Partial Index**

Clinical and Physiologic Evaluation of Vagotomy in Treatment of Peptic Ulcer. I. F. Stein Jr. and K. A. Meyer.—p. 131.
Intervertebral Disk Syndrome. P. Lewin.—p. 137.
Endometriosis as Cause of Small Bowel Obstruction: Report of 3 Cases. E. L. Zander, V. D'Ingianni and E. L. Drewes.—p. 149.
Present Concepts in Management of Both Chronic and Acute Appendicitis with Report on 12,813 Consecutive Appendectomies. D. C. Collins.—p. 154.
Tourniquet Amputation. S. R. Maxeiner.—p. 171.
Preliminary Ileostomy as Important Aspect of Colon Surgery Based on Thirty Years of Clinical Experience. A. A. Strauss.—p. 178.
New Operation for Sliding Hernia. A. H. Iason.—p. 182.
Massive Resection Operation for Varicosities of Leg Without Massive Sclerosing Therapy. N. Garber.—p. 187.
Results with Medullary Nailing of Fractures of Femur. E. Hedri.—p. 191.
Intravenous Solutions: Facts and Fancies. L. Rademaker.—p. 194.
Twin Stitches: New Technic. R. Tauber.—p. 200.
Subphrenic Abscess. M. J. Rajanna.—p. 205.

Public Health Reports, Washington, D. C.

63:777-804 (June 11) 1948

Nutrition Studies: II. Methods of Collecting Dietary Data. Miriam G. Eads and Alla P. Meredith.—p. 777.
Observations on Rats and Typhus Fever in San Antonio, Tex. D. E. Davis.—p. 783.
Studies of Acute Diarrheal Diseases. XX. Further Observations of Chemotherapy in Shigellosis; Efficacy of Streptomycin and Sulfacarrole. A. V. Hardy and S. P. Halbert.—p. 790.

Quart. Journal Studies on Alcohol, New Haven, Conn.

9:1-72 (June) 1948

Some Sociologic Concomitants of Excessive Drinking as Revealed in the Life History of an Itinerant Inebriate. R. Straus.—p. 1.
Conditioned Reflex and Psychodynamic Equivalents in Alcohol Addiction. B. Freedman.—p. 53.
Research Project on the Etiology of Alcoholism. O. Diethelm.—p. 72.
Alcohol Problem and the Law. E. G. Baird.—p. 80.
Sociohistorical Survey of Alcoholics Anonymous. O. W. Ritchie.—p. 119.

Radiology, Syracuse, N. Y.

50:569-724 (May) 1948

*Method of Roentgenologic Examination of Shoulder. W. E. Howes and B. B. Alicandri.—p. 569.
Chronic Idiopathic Hypertrophic Osteo-Arthropathy. J. D. Camp and R. L. Scanlan.—p. 581.
Roentgen Appearance of Ossifying Fibroma of Bone. R. S. Sherman and W. C. A. Sternbergh.—p. 595.
Importance of Intra-Alveolar Pressure in Diagnosis of Pulmonary Diseases. N. Westermark.—p. 610.
Bone and Joint Lesions in Leprosy: Radiologic Study. G. Esguerra-Gomez and Emilio Acosta.—p. 619.
Hydronephrosis: Radiologic Classification Based on Anatomic Variations. S. A. Robins and J. Fischmann.—p. 632.
Effective Compression in Excretory Pyelography. H. R. Zatzkin.—p. 639.
Further Observations on Use of Three-Million-Volt Roentgen Therapy. R. Dresser.—p. 645.
Physical Basis for High Skin Tolerance of Supervoltage Roentgen Rays. J. G. Trump.—p. 649.
Venous Calcification in Banti's Syndrome: Report of Case. A. R. Bleich and C. S. Kipen.—p. 657.
Malignant Plasmocytoma of Nasopharynx: Case of Multiple Myeloma Primary in Nasopharynx. M. M. Greenfield.—p. 661.
Prenatal Estimation of Birth Weight by Pelvicephalometry. S. W. Donaldson and W. D. Cheney.—p. 666.

SYMPOSIUM ON SOCIALIZED MEDICINE
Introduction. L. S. Goin.—p. 674.
Government Interference in Medicine. Marjorie Shearon.—p. 677.
Implications of Social Medicine for Radiologists. M. F. Cahal.—p. 683.

Roentgenologic Examination of Shoulder.—Howes and Alicandri became aware that the usual roentgenograms of the shoulder, namely, anteroposterior views with the hand in supination and pronation, are insufficient, even if taken in stereoscopic pairs. They made a study of the roentgen anatomy of the shoulder to locate more accurately the site of calcifications in the tendon sheaths of the short rotator muscles and subacromial bursa; to clarify the exact location of fractures, particularly those involving the tuberosities, and to identify and locate periosteal and subcortical zones of reaction secondary to tendon injury. To realize these aims, the authors suggest that five views be taken: (1) the patient in supine position, hand in supination, shoulder elevated on a twenty-three degree angle block to open up the articular space between the humeral head and the acromial process of the scapula and bring into profile the face for the insertion of the infraspinatus tendon; (2) the patient in supine position, hand in supination, with the central ray at 180 degrees to skirt the anterior margin of the greater tuberosity, to demonstrate the insertion of the supraspinatus tendon; (3) the patient in supine position, hand in pronation, with central ray at 180 degrees to skirt the posterolateral margin of the greater tuberosity, bringing into profile the insertion of the teres minor tendon; (4) the patient in sitting position, with central ray directed upward and medially through the axilla, bringing out the glenoid neck as well as the two processes of the scapula and bringing into profile the lesser tuberosity, demonstrating the insertion of the subscapularis tendon anteriorly and the teres minor posteriorly, and (5) patient in supine position, hand in exaggerated external rotation, tube below the table top and directed into the bicipital groove, bringing into profile the walls of the groove as well as both the greater and lesser tuberosities and further confirming localization of calcifications overlying either tuberosity. Additional views may be taken at various degrees of angulation off these standards in specific instances.

Surgery, St. Louis

23:867-1034 (June) 1948

Introduction to Symposium on Cancer of Esophagus and Gastric Cardia. G. T. Pack.—p. 867.
Roentgen Diagnosis of Cancer of Cardiac Region of Stomach. R. S. Sherman.—p. 874.
Preoperative, Operative, and Postoperative Care in Esophageal Resections. H. C. Maier.—p. 884.
Cancer of Cervical Esophagus: Discussion of Treatment. W. L. Watson and J. L. Pool.—p. 893.
Progress in Surgical Treatment of Carcinoma of Esophagus and Upper Stomach. J. H. Garlock.—p. 906.
Transthoracic Gastric Resection for Lesions of Cardia of Stomach and Lower Part of Esophagus: Review of Cases. J. H. Payne and T. Clagett.—p. 912.
Cardioesophageal Cancers Treated Via Transthoracic and Transdiaphragmatic Route. F. De Amesti and E. Otaiza.—p. 921.
Subtotal Esophagectomy and Esophagogastrostomy for High Intrathoracic Esophageal Lesions. M. E. DeBakey and A. Ochsner.—p. 935.
Treatment of Carcinoma of Esophagus and Cardiac End of Stomach by Surgical Extirpation: 203 Cases of Resection. R. H. Sweet.—p. 952.
Surgical Treatment of Cancers of Gastric Cardia. G. T. Pack and G. McNeer.—p. 976.

FOREIGN

An asterisk (*) before a title indicates that the article is abstracted. Single case reports and trials of new drugs are usually omitted.

British Journal of Radiology, London

21:211-264 (May) 1948. **Partial Index**

Gamma Ray Protection in Radium Therapy. C. W. Wilson and J. R. Greening.—p. 211.
*Value of Platelet Counts in Radiotherapy. W. M. C. Brown.—p. 221.
Radiology in Heart Surgery. T. H. Sellors.—p. 226.
Engelmann's Disease: Osteopathia Hyperostotica Sclerotisans Multiplex Infantilis: Report of Case. H. R. Sear.—p. 236.
Tibia Vara: Case of Doubtful Etiology. H. Morris.—p. 242.
Experimental X Irradiation of Rat Thyroid. A. E. Bender.—p. 244.
Mammary Cancer: Place of Surgery and of Radiotherapy in Its Management. Part II: Radiotherapeutic Procedures. G. E. Richards.—p. 249.

Platelet Counts in Radiotherapy.—Brown points out that with the increasing use of wide field roentgen therapy the constitutional effects of radiation have become more important than such local effects as the cutaneous reaction. In particular, the effects resulting from excessive irradiation of the bone marrow require careful attention, for unless wide field irradiation is carefully controlled a severe or even fatal anemia may develop at a later date. A review of the records of cases in which severe anemia had developed after wide field irradiation indicated that these patients often showed skin hemorrhages similar to those of thrombopenic purpura, and it was noted that these skin hemorrhages preceded in their appearance the development of the anemia. Accordingly, the effect of radiation on the platelet count was studied and the conclusion was reached that the blood platelet level is a more reliable indicator of the effect of radiation on the bone marrow than the total white cell count. By determining the blood platelet level it is possible to avoid altogether the production of partial or permanent marrow failure. The use of the platelet level in the planning of treatment is described. The relationship between the development of petechial hemorrhages and radiation-induced thrombopenia is discussed.

British Medical Journal, London

1:965-1014 (May 22) 1948

Pulmonary Edema. G. R. Cameron.—p. 965.
New Conception of Angina Pectoris. R. Wyburn-Mason.—p. 972.
Tolerance Limits to Radiant Heat. D. L. Lloyd-Smith and K. Mendelssohn.—p. 975.
Sudden Death After Intravenous Sodium Bismuth Tartrate. L. Goodman.—p. 978.
Case of Murine Typhus in London. T. B. Dunn.—p. 979.
Two Cases of Tetanus Neonatorum. C. A. St. Hill and H. Lederer.—p. 980.

Edinburgh Medical Journal

55:193-256 (April) 1948. **Partial Index**

Investigation of Chronic Diarrhea in Adults. W. L. Lamb.—p. 203.
Scottish Pioneers in Tropical Medicine. P. Manson-Bahr.—p. 220.
The Child's Inheritance: Hereditary, Pre-Natal and Natal Influences. J. L. Henderson.—p. 232.
A Hundred Years of Chloroform. D. Guthrie.—p. 246.
Cholesterol Pleural Effusion. T. M. Curran.—p. 252.

Journal of Hygiene, London

46:1-116 (March) 1948. **Partial Index**

Outbreak of Infantile Gastro-Enteritis in Aberdeen: Association of Special Type of Bact. Coli with Infection. C. Giles and G. Sangster.—p. 1.
Rat Control in Plague Outbreak in Malta. S. A. Barnett.—p. 10.
*Further Work on Forecasting Smallpox Epidemics in India and British Tropical Countries Based on Previous Climatic Data. L. Rogers.—p. 19.
Combined Active and Passive Immunization Against Diphtheria. A. W. Downie, A. T. Glenny, H. J. Parish and others.—p. 34.
Studies on Vaccinia Hemagglutinin. C. M. Chu.—p. 42.
Inhibitory Action of Monoethyl Esters of S-n-Alkylthiomalic Acids and Monoethyl Esters of Alkane Sulphonyl Succinic Acids on Growth of Mycobacterium Tuberculosis. P. A. McNally.—p. 60.
Bacterial Lysis and Antiseptics. R. J. V. Pulvertaft and G. D. Lumb.—p. 62.
Investigations on Typing of Staphylococci by Means of Bacteriophage. H. W. Smith.—p. 74.
Entamoeba Histolytica in Wild Rats Caught in London. R. A. Neal.—p. 90.
Diagnostic Value of Widal Test in Inoculated. R. H. Mole.—p. 98.
Infective Hepatitis Among Civilians in Palestine. L. Olitzki, R. Bachi and G. Kallner.—p. 101.

Forecasting Smallpox Epidemics on Climatic Data.—Rogers shows that earlier work on forecasting epidemics of smallpox in India, based on the study of the previous rainfall and humidity, has been confirmed and extended. An extension of the inquiry to other tropical countries indicates that in tropical countries in general with well marked dry and wet seasons, the annual decline of smallpox incidence to a low minimum in relation to high absolute humidities during the rainy season is the rule; for it is absent in equatorial Uganda with rains throughout the year, and both the monsoon period and the monthly incidence of smallpox are reversed in such a country of the Southern hemisphere as Nyassaland in accordance with the general rule. Where smallpox is endemic, increased prevalence in any year may usually be foreseen by watching the meteorologic records in time to control the expected increase to some extent by increased use of vaccination.

South African Journal Medical Sciences, Johannesburg

13:1-46 (Jan.) 1948

*Relationship Between Ectoparasite and Host. Botha De Meillon, J. M. Thorp and F. Hardy.—p. 1.
Anoxia and Liver with Special Reference to Shock and Chronic Malnutrition. J. Gillman and T. Gillman.—p. 11.
Method for Determination of Hippuric Acid in Urine. J. W. F. Hampton.—p. 45.

Relationship Between Ectoparasite and Host.—De Meillon, Thorp and Hardy gave to rabbits by mouth or intravenous injection various drugs and noted the effects on the rate of development, survival and egg-production of Cimex lectularius. All of the following drugs given by intravenous injection produced some adverse effect on Cimex lectularius: quinine dihydrochloride, quinacrine hydrochloride, tryparsamide, neoarsphenamine and epinephrine. Of these, tryparsamide and neoarsphenamine produced the most striking effects in allowing few bugs to reach maturity and in causing a delay in the molting time from the fifth instar to the adult stage. Oral administration of flowers of sulfur, decoction of aloes and syrup alli (B. P.) to rabbits were without effect on the Cimex lectularius fed by these rabbits. Experiments in which Cimex lectularius was reared on rats receiving a protein-deficient diet show that bedbugs develop normally up to the fifth instar but during the process of molting to the adult stage a large proportion die—death being due to herniation of the intestine and its contents through the new cuticle of the partially molted adult. About 40 per cent of bugs which manage to molt successfully to the adult stage die within a week. Egg production of adults which survive long enough to be tested is erratic but on the whole lower than normal. Normal egg production appears to be resumed after a single feed on a normal animal.

Presse Médicale, Paris

56:405-416 (June 12) 1948. **Partial Index**

Experimental Study on the "Bile Treated" Bacillus-Guerin. L. Nègre and J. Bretey.—p. 407.
Technical Modifications Gradually Brought About in BCG Vaccination. B. Weill-Hallé.—p. 409.
*Extension of Prophylaxis of Tuberculosis by the BCG Bacillus to Adolescents and Adults. A. Courcoux.—p. 410.

BCG Vaccine for Adolescents and Adults.—Courcoux points out that a large number of adolescents and adults retain a negative tuberculin reaction. Sooner or later these anergic young adults will have contact with tubercle bacilli, and this late primary infection threatens more than 1 in 3 persons between 15 and 25 years of age. Experience proves that this late primary infection may terminate in a tuberculous process. Vaccination with BCG is advisable to protect these young persons against tuberculosis. Experiments carried out in France have proved conclusive. These results were confirmed in other countries, chiefly in Sweden and other Northern countries in which BCG vaccination has been performed on a large scale. The author reports statistics on trials carried out in four nurses' schools. In these the incidence of tuberculosis among the pupils has been reduced to almost zero, whereas it was between 35 and 38 per cent in the years before the BCG vaccination was instituted. The author concludes that young persons with negative tuberculin reaction should be treated with BCG vaccine before starting to work, and they should be kept away from tuberculous contacts two months before and two months after this treatment.

Book Notices

Essentials of Public Health. By William P. Shepard, B.S., M.D., M.A. With the Collaboration of Charles Edward Smith, M.D., D.P.H., Rodney Ray Beard, M.D., M.P.H., and Leon Benedict Reynolds, A.B., Sc.D. With a foreword by Ray Lyman Wilbur, M.D., LL.D., Sc.D., Chancellor, Stanford University, Stanford, California. Fabrikoid. Price, $5. Pp. 600, with 30 illustrations. J. B. Lippincott Co., 227-231 S. 6th St., Philadelphia 5, 1948.

This is a manual on public health presented as a condensed handbook for physicians in private practice, medical students and members of allied professions. Its purpose is stated as "to set forth the purposes and methods of public health work." This is done simply, concisely and clearly. In addition to the four authors, numerous authorities in various fields of public health and preventive medicine have served as consultants and contributors. The book begins with a chapter orienting the practice of medicine in the field of public health, and proceeds to consider environmental sanitation, communicable disease control, including tuberculosis and the venereal diseases, and other public health problems, such as maternal and child health, infant health, health of the preschool child, heart disease, cancer, mental hygiene, diabetes, conservation of vision and hearing, crippled children, dental hygiene, nutrition, housing and health, school health services, health education, occupational health and statistics.

Under each heading is a careful interpretation of the physician's relationships to the public health program. Throughout the book the author gives evidence of a wholesome appreciation of the importance of the practicing physician and an impartial willingness to concede that mistaken conduct on the part of either the private physician or the representative of the health department leads to needless misunderstanding and destructive antagonisms.

A Psychiatric and Sociologic Study of a Series of Swedish Naval Conscripts. By Martin Ekblad. Acta psychiatrica et neurologica Supplementum 49. From the Swedish by Grace Lundberg. Paper. Pp. 291. Ejnar Munksgaard, Nørregade 6, Copenhagen K, 1948.

The author of this monograph utilizes Swedish compulsory military training to analyze psychiatric and social characteristics of a sample of naval conscripts, 995 of whom were personally interviewed and evaluated. From what is a good sample and statistically sound, he attempts to evaluate these factors of personality, background and physical equipment in relation to the character of service performed by the entire group and certain portions of the group having identifying characteristics. The usefulness of being able to predict, in general, future performance of individuals with certain levels of intelligence and other characteristics such as criminal records, broken homes, etc., will be obvious to all who have had to select or disqualify men for military duty.

The group of naval conscripts studied is particularly uniform. All were inducted between the ages of 20 and 22 and at about the same time and place. The men are only "unqualified conscripts from the ranks," since students and other similar categories who were in an exceptional position because of earlier training were not included.

All the men discussed had physical and psychiatric examinations and were psychologically tested. Written inquiries were made in their home communities and schools concerning past performance and family background. The Swedish penal register was searched for convictions. All convictions, complaints and illnesses of conscripts while serving were analyzed.

The author divides men into two categories: (*a*) those with former experience as merchant seamen, and (*b*) conscripts without sea experience. On comparison of these two groups, the "seamen" conscripted were found to be of a slightly higher intellectual level than the "nonseamen" group. Of the two groups, however, 33 per cent of the "seamen" were classified by the author as psychopathic, as compared with only 15 per cent of the "nonseamen." This is rather remarkable, since the author points out that social maladjustment alone was not taken to be sufficient to justify a diagnosis of psychopathy; signs of abnormal personality were also required. In spite of this standard, 58 per cent of the "seamen" completed their military training without a break or any insufficiency reaction, and 87 per cent of the "nonseamen." "Seamen" conscripts were more often delinquent, and there was a higher incidence of mentally abnormal and maladjusted persons among the "seamen" than in a corresponding group of "nonseamen.

The mental level distribution and incidence of psychopathy in the "nonseamen" is essentially the same as in the general population of Sweden of the same age group. This testifies to the validity of the sample studied.

From a study of the conscripts who completed their training without a break or without being sentenced, including conscripts promoted to the rank of "able seaman," a surprisingly large number had low intelligence test scores. The author states that a low intelligence test score with a mental age as low as 9 years is not sufficient cause, in itself, for exempting a man from service except in those cases in which other personality defects can also be demonstrated.

As a result of the study of military convictions, the author found that a single offense over a period of time does not necessarily constitute a sign of mental abnormality, whereas more than two offenses almost without exception is a sign of psychopathy. Punishment as a result of convictions is of little value except as a morale factor to other conscripts. He therefore advocates that all men convicted of an offense be seen by a psychiatrist. As a counterpart, civil delinquency in youth prior to training usually points to a personality disturbance. Those from broken homes and of illegitimate birth have more difficulty in adjusting to military life than others.

The author's tabulations show that those with the lowest grades of intelligence (mental age below 12 years) are least able to stand extraordinary mental stress during training. Yet those with only slightly below average intelligence (12 to 14 years) are as capable of standing stress as those above average intelligence. Delinquency in civil life before training was actually less in those with a mental age below 12 than those with higher levels.

Drunkenness prior to conscription had no relationship to intellectual level, although several offenses, such as multiple civil convictions, in a large measure may be regarded as a sign of adjustment difficulty.

Eighty-nine per cent of the men who completed their training without a break were mentally normal, including 8 per cent with a mental age of 11 years or below, while only 17 per cent of those sent to a psychiatrist were normal, including 5 per cent with a mental age of 11 years or below.

In conclusion, the author states that exemption from military service because of mental deficiency should be granted only when the mental age is below 9 years; that persons with severe psychopathy should be exempted; that persons with milder forms should serve because of the morale factor; that psychopaths will be weeded out if all men sentenced for a military offense are seen by a psychiatrist, and that men sentenced for a military offense should be permitted to count as military service all time spent in serving sentences inflicted in connection with military crimes.

The last of these conclusions, the opposite to present practice, stems from the feeling that only the persons with less severe psychopathy should be in service and that because of their limited usefulness they should serve their terms only as a morale factor for the other men.

Stereoscopic Atlas of Neuroanatomy. By H. S. Rubinstein, M.D., Ph.D., Director of the Alfred Ullman Laboratory for Neuro-Psychiatric Research, Sinai Hospital, Baltimore, and C. L. Davis, M.D., Professor of Anatomy, School of Medicine, University of Maryland, Baltimore. Paper. Price, $10. Pp. 19, with 43 plates. Grune & Stratton, Inc., 381 Fourth Ave., New York 16, 1947.

This publication consists of 10 pages of description of the technic of making a gross dissection of the brain and of 43 stereoscopic views illustrative of the gross anatomy of the brain. Since a stereoscope was not available to the reviewer; it may not be possible for him to judge accurately the relative merits of these illustrations. However, to the unaided eye they are not satisfactory. Certainly any serious student could learn far more from the gross dissection of an actual brain with any one of the several modern textbooks of neuroanatomy as a guide than from a detailed study of these views. It seems unlikely that these 43 stereoscopic views would be worth $10 to very many students.

Queries and Minor Notes

THE ANSWERS HERE PUBLISHED HAVE BEEN PREPARED BY COMPETENT AUTHORITIES. THEY DO NOT, HOWEVER, REPRESENT THE OPINIONS OF ANY OFFICIAL BODIES UNLESS SPECIFICALLY STATED IN THE REPLY. ANONYMOUS COMMUNICATIONS AND QUERIES ON POSTAL CARDS WILL NOT BE NOTICED. EVERY LETTER MUST CONTAIN THE WRITER'S NAME AND ADDRESS, BUT THESE WILL BE OMITTED ON REQUEST.

LIZARD AND SPIDER BITES

To the *Editor*:—What is the method of treatment for (1) a child or adult bitten by Heloderma (the Gila monster); (2) a child or adult bitten by members of the class of arthropods known as Arachnida (a) specifically by the small scorpion which has the so-called tubercle on the tip of its tail; (b) black widow spider bite? J. Gitlitz, M.D., Sacaton, Ariz.

ANSWER.—(1) The local treatment is the same as for snakebite. Heloderma is found in Arizona and New Mexico chiefly, and is one of the two lizards with a venomous bite. The other venomous lizard is the beaded lizard of Southwestern Mexico. Its bite rarely is serious, because the sluggish habits of the lizard and its anatomic construction do not favor easy or abundant introduction of venom with the bite. More venom is introduced if the lizard is on its back when it bites. After biting, the lizard is often hard to dislodge. Paralysis, dyspnea and convulsions may follow. Death rarely ensues.

(*2a*) Scorpions belong to the order of Scorpionida in the class of Arachnida. About three hundred species are known. The tip of the tail has a prominent bulblike enlargement which carries the terminal sting, which alone is dangerous for man. In parts of Mexico and Brazil the genera Centruroides and Tityus are dangerous. In Egypt Buthus is especially dangerous. Tropical scorpions may be as much as 8 inches (20.3 cm.) in length, but the size of the animal is no index of its poisonous properties.

Scorpions are nocturnal, seizing spiders and large insects with their claws and stinging them to death. In the daytime they hide under buildings, boards, stones and debris, also in clothing and shoes. The symptoms of sting are first a local intense burning pain, followed by drowsiness, severe nausea, sweating and vomiting. Speech becomes difficult and oral administration of medicine may be practically impossible. A fever (up to 104 or 105 F.) ensues. Photophobia is common. Hemorrhage can occur into the intestine, stomach or lungs, and pulmonary edema may occur. Reflexes are exaggerated and convulsions may occur. Survival for three hours means a good prognosis, although death has been reported on the fifteenth day. The poison acts through the nervous system on the respiratory and cardiac centers.

Treatment should be immediate with a tight proximal ligature, free incision of the sting area and suction to remove venom. Morphine and sedatives are often necessary for the pain and to promote sedation. A drop of strong ammonia on the site of sting may help alleviate the pain, but morphine hypodermically is more reliable. The small scorpions of the Southern United States are probably never fatal in biting but may be extremely painful and give rise to constitutional symptoms. Specific antivenin is efficacious when available.

(*2b*) The "black widow" spider, Latrodectus matans, is said to have caused 400 reported cases with 16 deaths in the United States. It is found from southern Canada to South America as far south as Peru and Chile. The bite causes excruciating pain, scarcely yielding to morphine. The venom, as in cobra poisoning, is most active on nerve ends. Ten per cent solution of calcium gluconate, 10 cc., should be given intravenously or intramuscularly. Sheep or horse specific antivenin has been prepared and is said to be obtainable from Mulford or Squibb. Desensitization should be done before use of these serums. Hot applications to the site of the bite may help relieve the pain. In bites on the extremities a tourniquet should be applied, and suction used on incisions of the bite area. The spiders are common under privy seats and bites about the genitals are common.

CHEMICAL RESPIRATORY IRRITATION

To the *Editor*:—Is there any connection between frequent colds in the head and respiratory irritation from sulfur dioxide?

F. J. Devens, M.D., Menominee, Mich.

ANSWER.—Chemical irritants can and do produce irritation to the nasal mucosa of such a degree as to result in symptoms of acute rhinitis. Frequent colds may follow because of persisting engorgement with stasis and obstruction. Impaired ciliary activity further predisposes to infection. Patients subjected to the fumes of chemicals are more likely to experience episodes of acute infection of the upper respiratory tract.

VIRUS X INFECTION

To the *Editor*:—At present in this city many cases of so-called virus X infections, characterized by high grade and prolonged fever with virtually negative results of physical examination, are occurring. The urine is normal. Blood shows a peculiar picture with high relative lymphocytosis and monocytosis. Treatment seems to be entirely ineffective, although the prognosis appears to be good. From lay sources in Great Britain I have learned that they seem to possess an efficient treatment for such infections. No further pertinent information could be obtained from these sources. Please advise.

Walter Newman, M.D., Springfield, Mass.

ANSWER.—The term "virus X infection" was coined in Los Angeles in December 1947 to designate a disease of the respiratory tract which was similar to influenza but did not give the serologic reactions of either influenza A or influenza B. Later, it was shown that this outbreak was caused by an influenza virus which has since been designated as influenza A'. Since the outbreak in Los Angeles, many infectious diseases of unknown or unidentified cause have been called virus X infections. Some of these outbreaks may have been due to an influenza virus; others most likely were not. No statement regarding the cause of the present outbreak in Springfield, Mass., has been seen. It would certainly be unusual for an influenza virus to be operating in June. No statement has been seen concerning an effective treatment in Great Britain for the so-called virus X infections. There is a vaccine for influenza A and for influenza B. These, however, were not effective against influenza A'. Since the outbreak in Los Angeles, influenza A' virus has been included in the vaccine against influenza.

RABIES

To the *Editor*:—Is there ground for the opinion recently offered by physicians that the Pasteur treatment is not of value in preventing rabies after a person had been bitten by a known rabid animal?

M.D., Mississippi.

ANSWER.—The statement that the Pasteur antirabic method is not of value in the prevention of rabies after bites by rabid animals is groundless. Before the method came into use, about 15 per cent of persons bitten died of rabies. Since the introduction of the method, less than 1 per cent have died of rabies. The Pasteur Institute of Southern India (founded in 1907) at Conoor and its subsidiary centers reported (Annual Report of the Directory, 1946-1947, Madras, 1947) a death rate of not more than 0.99 per cent among thousands of persons given antirabic treatment after bites and scratches by rabid animals, mostly dogs. In 1946 the rate was 0.08 per cent. While the treatment for the prevention of rabies after bites by rabid dogs or other animals may not be effective, especially in patients treated in the latter stages of the incubation period, it is the only specific method of prevention now available, and it should be used promptly and faithfully in all cases in which it may be of value.

SEDIMENTATION RATE

To the *Editor*:—What, if any, effect do drugs have on the sedimentation rate of the blood? I am particularly interested in the effect of acetylsalicylic acid and antihistaminic drugs, such as diphenhydramine, "amytal" (5-isoamyl-5-ethylbarbituric acid) and ephedrine mixtures.

Francis E. Gilley, M.D., Cleveland.

ANSWER.—It has been demonstrated frequently that acetylsalicylic acid and other salicylates will slow the sedimentation rate of red blood cells when given to the patient in considerable dosage and will cause striking decrease in the sedimentation rate when added to the blood in a test tube. Salicylates, in general, increase the stability of suspensions of red cells in plasma. Information is not available on the other drugs that are mentioned.

ALLERGY TO VITAMINS

To the *Editor*:—Does anaphylaxis to vitamins occur?

M.D., Florida.

ANSWER.—Although sensitivity to vitamins has been reported in the literature, confirmation is needed before such studies can be accepted. Some of the "allergic" responses produced by vitamins may prove to be due to impurities or other extraneous factors rather than the vitamin per se. Toxic reactions to extremely large doses of certain vitamins have been reported, but these reactions are toxic rather than allergic in nature. As the occurrence of proved allergic or anaphylactic reactions to chemically pure vitamins requires further study, a categorical answer cannot be given to this question.